Operation, Parts

334606B

DutyMax EH/GH™230/300 Hydraulic Sprayers

EN

For professional use only.
Not approved for use in explosive atmosphere or hazardous locations.
For portable airless spraying of architectural paints and coatings.

3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure

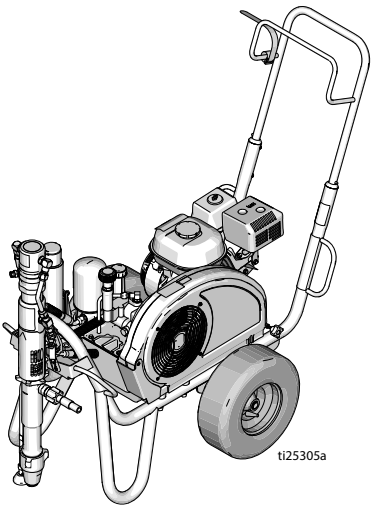
See page 3 for model information, including maximum working pressure and approvals.

Important Safety Instructions

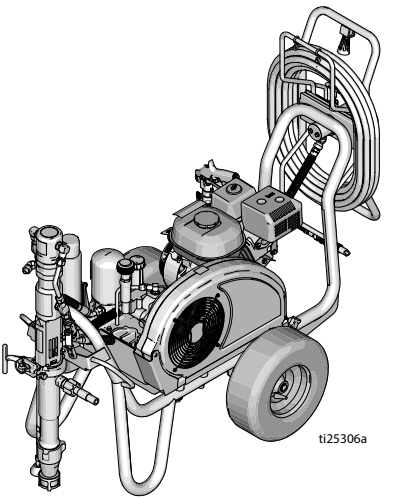
Read all warnings and instructions in this manual and in related manuals.
Be familiar with the controls and the proper usage of the equipment.
Save these instructions.

Related Manuals:

308491	DutyMax GH230 Gun	334654	Pump
309495	DutyMax GH300 Gun	310812	Electric Motor



Standard Series



ProContractor Series

Use only genuine Graco replacement parts.
The use of non-Graco replacement parts may void warranty.

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Models

DutyMax EH230 Direct Immersion				
Model:	Standard	ProContractor		
24W941	✔			
24W942		✔		
DutyMax GH230 Direct Immersion				
Model:	Standard	ProContractor	120V Motor Kit	120V ETL/CSA/UL Motor Kit
24W943	✔			
24W944	✔		✔	
24W945	✔			✔
24W962		✔		
24W963		✔	✔	
24W964		✔		✔
DutyMax EH300 Direct Immersion				
Model:	Standard	ProContractor		
24W965	✔			
24W966		✔		
DutyMax GH300 Direct Immersion				
Model:	Standard	ProContractor		
24W967	✔			
24W968		✔		

Electric Motor Kit Options

Kit Number	Sprayer Model	Description
288474	GH130	120VAC, 60Hz, 20A, ETL/CSA/UL Approved
288473	GH130	120VAC, 60Hz, 15A
248950	GH200/GH230/GH300*	120VAC, 60Hz, 20A, ETL/CSA/UL Approved
248949	GH200/GH230/GH300*	120 VAC, 60Hz, 15A
24M668	GH200/GH230/GH300*	240VAC, 50Hz, 13.4A
24M669	GH300	400VAC, 50Hz, 11.0A

*Performance is limited when using electric motor

OEM Kits

Kit Number	OEM Model	Description
24W297	GH130 OEM	3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure (psi)
24W298	GH200 OEM	3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure (psi)
24W299	GH230/300 OEM	3300 psi (22.8 MPa, 228 bar) Maximum Working Pressure (psi)

Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

Electric Motor Warnings

⚠ DANGER

HIGH VOLTAGE ELECTRIC SHOCK HAZARD

This equipment uses high voltage power. Improper contact with high voltage equipment will cause death or serious injury.

- Turn off and disconnect power cord before servicing equipment.
- This equipment must be grounded. Connect only to grounded power source.
- Use only 3-wire extension cords for 240V and single phase models.
- Use only 5-wire extension cords for 400 AC and three phase models.
- Ensure ground prongs are intact on power and extension cords.
- Do not expose to rain. Store indoors.

⚠WARNING

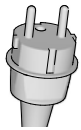
GROUNDING

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with an appropriate grounding plug. The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

- Improper installation of the grounding plug is able to result in a risk of electric shock.
- When repair or replacement of the cord or plug is required, do not connect the grounding wire to either flat blade terminal.
- The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.
- Check with a qualified electrician or serviceman when the grounding instructions are not completely understood, or when in doubt as to whether the product is properly grounded.
- Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.
- This product is for use on a nominal 120V or 230V circuit and has a grounding plug similar to the plugs illustrated in the figure below.

120V US

230V



- Only connect the product to an outlet having the same configuration as the plug.
- Do not use an adapter with this product.

Extension Cords:

- Use only a 3-wire extension cord that has a grounding plug and a grounding receptacle that accepts the plug on the product.
- Make sure your extension cord is not damaged. If an extension cord is necessary, use 12 AWG (2.5 mm^2) minimum to carry the current that the product draws.
- An undersized cord results in a drop in line voltage and loss of power and overheating.

Electric Motor Warnings

⚠WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. To help prevent fire and explosion:

- Do not spray flammable or combustible materials near an open flame or sources of ignition such as cigarettes, motors, and electrical equipment.
- Paint or solvent flowing through the equipment is able to result in static electricity. Static electricity creates a risk of fire or explosion in the presence of paint or solvent fumes. All parts of the spray system, including the pump, hose assembly, spray gun, and objects in and around the spray area shall be properly grounded to protect against static discharge and sparks. Use Graco conductive or grounded high-pressure airless paint sprayer hoses.
- Verify that all containers and collection systems are grounded to prevent static discharge. Do not use pail liners unless they are antistatic or conductive.
- Connect to a grounded outlet and use grounded extensions cords. Do not use a 3-to-2 adapter.
- Do not use a paint or a solvent containing halogenated hydrocarbons.
- Do not spray flammable or combustible liquids in a confined area.
- Keep spray area well-ventilated. Keep a good supply of fresh air moving through the area.
- Sprayer generates sparks. Keep pump assembly in a well ventilated area at least 20 feet (6.1 m) from the spray area when spraying, flushing, cleaning, or servicing. Do not spray pump assembly.
- Do not smoke in the spray area or spray where sparks or flame is present.
- Do not operate light switches, engines, or similar spark producing products in the spray area.
- Keep area clean and free of paint or solvent containers, rags, and other flammable materials.
- Know the contents of the paints and solvents being sprayed. Read all Material Safety Data Sheets (MSDS) and container labels provided with the paints and solvents. Follow the paint and solvents manufacturer's safety instructions.
- Fire extinguisher equipment shall be present and working.

Gas Engine Warnings

⚠WARNING

FIRE AND EXPLOSION HAZARD

Flammable fumes, such as solvent and paint fumes, in **work area** can ignite or explode. To help prevent fire and explosion:

- Use equipment only in well ventilated area.
- Do not fill fuel tank while engine is running or hot; shut off engine and let it cool. Fuel is flammable and can ignite or explode if spilled on hot surface.
- Eliminate all ignition sources; such as pilot lights, cigarettes, portable electric lamps, and plastic drop cloths (potential static arc).
- Keep work area free of debris, including solvent, rags and gasoline.
- Do not plug or unplug power cords, or turn power or light switches on or off when flammable fumes are present.
- Ground all equipment in the work area. See **Grounding** instructions.
- Use only grounded hoses.
- Hold gun firmly to side of grounded pail when triggering into pail. Do not use pail liners unless they are antistatic or conductive.
- **Stop operation immediately** if static sparking occurs or you feel a shock**.** Do not use equipment until you identify and correct the problem.
- Keep a working fire extinguisher in the work area.

CARBON MONOXIDE HAZARD

Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death.

- Do not operate in an enclosed area.

BURN HAZARD

Equipment surfaces and fluid that is heated can become very hot during operation. To avoid severe burns:

- Do not touch hot fluid or equipment.

Electric Motor/Gas Engine Warnings

⚠WARNING

SKIN INJECTION HAZARD

High-pressure spray is able to inject toxins into the body and cause serious bodily injury. In the event that injection occurs, **get immediate surgical treatment.**

- Do not aim the gun at, or spray any person or animal.
- Keep hands and other body parts away from the discharge. For example, do not try to stop leaks with any part of the body.
- Always use the nozzle tip guard. Do not spray without nozzle tip guard in place.
- Use Graco nozzle tips.
- Use caution when cleaning and changing nozzle tips. In the case where the nozzle tip clogs while spraying, follow the **Pressure Relief Procedure** for turning off the unit and relieving the pressure before removing the nozzle tip to clean.
- Equipment maintains pressure after power is shut off. Do not leave the equipment energized or under pressure while unattended. Follow the **Pressure Relief Procedure** when the equipment is unattended or not in use, and before servicing, cleaning, or removing parts.
- Check hoses and parts for signs of damage. Replace any damaged hoses or parts.
- This system is capable of producing 3300 psi (22.8 MPa, 228 bar). Use Graco replacement parts or accessories that are rated a minimum of 3300 psi (22.8 MPa, 228 bar).
- Always engage the trigger lock when not spraying. Verify the trigger lock is functioning properly.
- Verify that all connections are secure before operating the unit.
- Know how to stop the unit and bleed pressure quickly. Be thoroughly familiar with the controls.

⚠WARNING

EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Always wear appropriate gloves, eye protection, and a respirator or mask when painting.
- Do not operate or spray near children. Keep children away from equipment at all times.
- Do not overreach or stand on an unstable support. Keep effective footing and balance at all times.
- Stay alert and watch what you are doing.
- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not kink or over-bend the hose.
- Do not expose the hose to temperatures or to pressures in excess of those specified by Graco.
- Do not use the hose as a strength member to pull or lift the equipment.
- Do not spray with a hose shorter than 25 feet.
- Do not alter or modify equipment. Alterations or modifications may void agency approvals and create safety hazards.
- Make sure all equipment is rated and approved for the environment in which you are using it.

PRESSURIZED ALUMINUM PARTS HAZARD

Use of fluids that are incompatible with aluminum in pressurized equipment can cause serious chemical reaction and equipment rupture. Failure to follow this warning can result in death, serious injury, or property damage.

- Do not use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents.
- Do not use chlorine bleach.
- Many other fluids may contain chemicals that can react with aluminum. Contact your material supplier for compatibility.

MOVING PARTS HAZARD

Moving parts can pinch, cut or amputate fingers and other body parts.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Pressurized equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.

⚠WARNING

ENTANGLEMENT HAZARD

Rotating parts can cause serious injury.

- Keep clear of moving parts.
- Do not operate equipment with protective guards or covers removed.
- Do not wear loose clothing, jewelry or long hair while operating equipment.
- Equipment can start without warning. Before checking, moving, or servicing equipment, follow the **Pressure Relief Procedure** and disconnect all power sources.

TOXIC FLUID OR FUMES HAZARD

Toxic fluids or fumes can cause serious injury or death if splashed in the eyes or on skin, inhaled, or swallowed.

- Read MSDSs to know the specific hazards of the fluids you are using.
- Store hazardous fluid in approved containers, and dispose of it according to applicable guidelines.

RECOIL HAZARD

Gun may recoil when triggered. If you are not standing securely, you could fall and be seriously injured.

PERSONAL PROTECTIVE EQUIPMENT

Wear appropriate protective equipment when in the work area to help prevent serious injury, including eye injury, hearing loss, inhalation of toxic fumes, and burns. Protective equipment includes but is not limited to:

- Protective eyewear, and hearing protection.
- Respirators, protective clothing, and gloves as recommended by the fluid and solvent manufacturer.

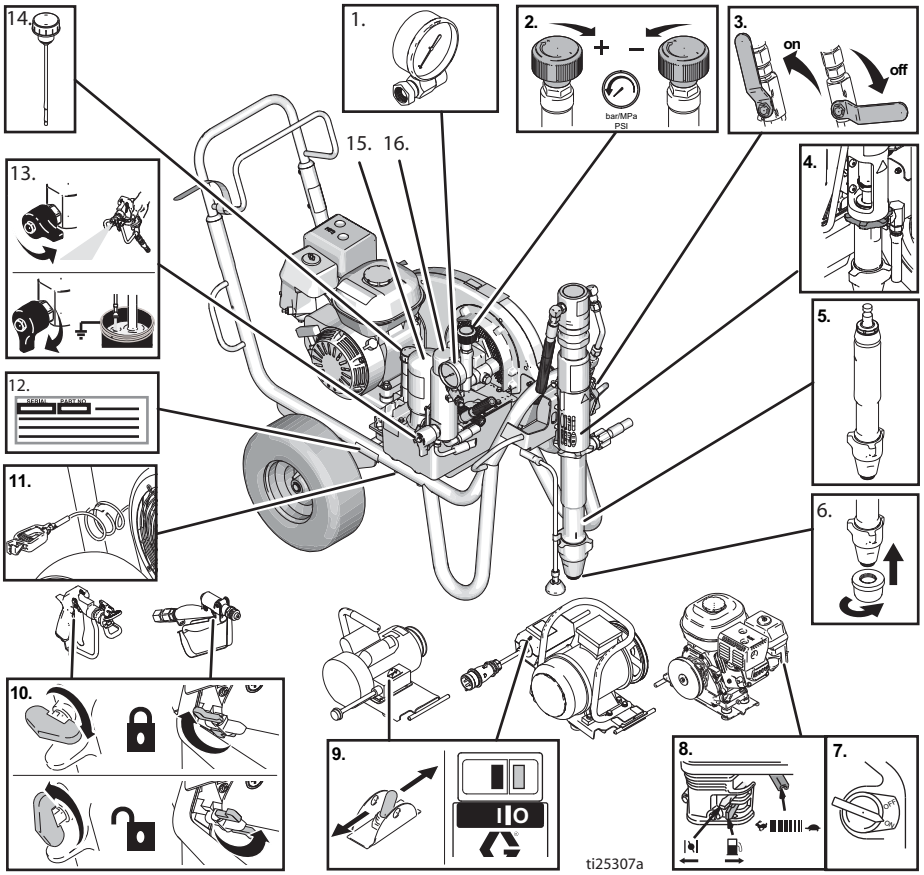
CALIFORNIA PROPOSITION 65

The engine exhaust from this product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm. Wash hands after handling.

Component Identification

Standard Models (EH/GH™230, 300)

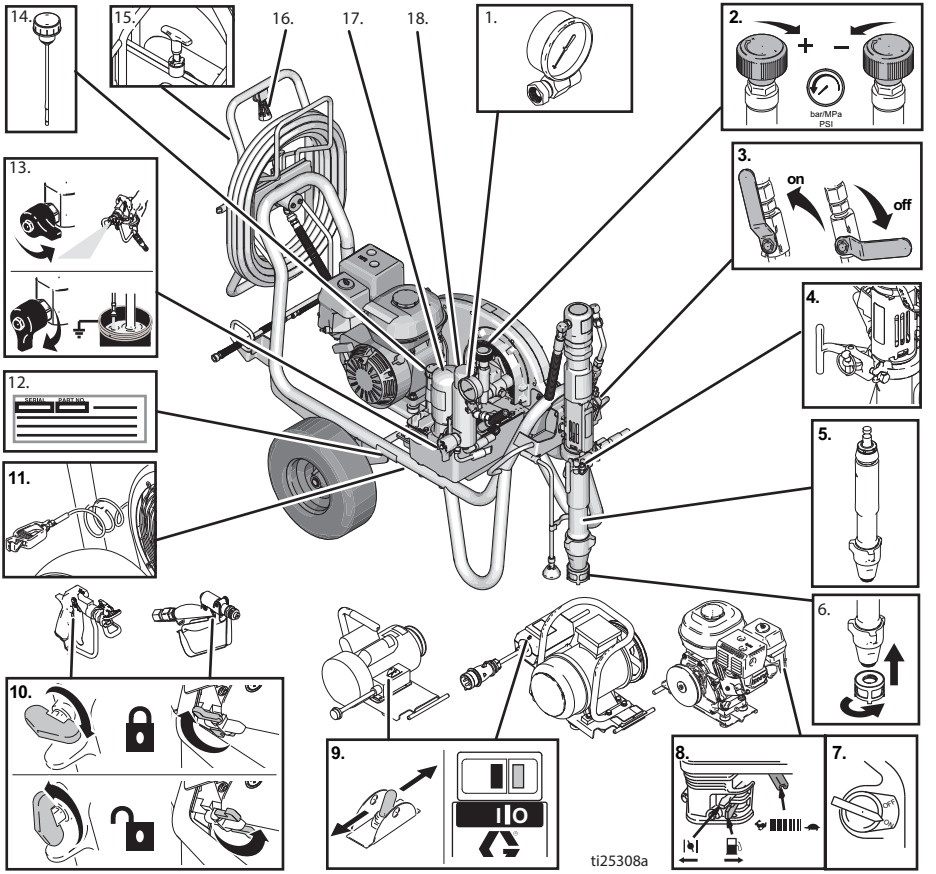


1	Pressure Gauge
2	Pressure Control
3	Hydraulic Pump Valve
4	Threaded Pump Connection
5	Displacement Pump
6	Inlet Strainer
7	Engine On/Off Switch
8	Engine Controls

9	Electric Motor On/Off Switch
10	GunTrigger Lock
11	Grounding Clamp
12	Serial Number Tag
13	Prime/Drain Valve
14	Hydraulic Oil Cap / Dipstick
15	Hydraulic Oil Filter
16	Paint Filter

Component Identification

ProContractor Models (EH/GH™230, 300)

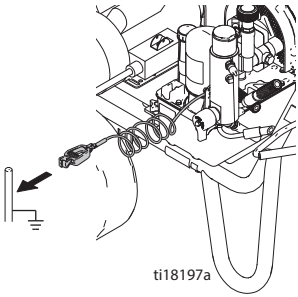


1	Pressure Gauge
2	Pressure Control
3	Hydraulic Pump Valve
4	ProConnect
5	Displacement Pump
6	Inlet Strainer
7	Engine On/Off Switch
8	Engine Controls
9	Electric Motor On/Off Switch

10	GunTrigger Lock
11	Grounding Clamp
12	Serial Number Tag
13	Prime/Drain Valve
14	Hydraulic Oil Cap / Dipstick
15	Hose Reel Lock
16	Hose Reel Handle
17	Hydraulic Oil Filter
18	Paint Filter

Grounding Procedure for Gas Engine

The equipment must be grounded to reduce the risk of static sparking. Static sparking can cause fumes to ignite or explode. Grounding provides an escape wire for the electric current.



To ground sprayer: Attach sprayer grounding clamp to earth ground.

Air and fluid hoses: Use only electrically conductive hoses with a maximum of 500ft. (150 m) combined hose length to ensure grounding continuity. Check electrical resistance of hoses. If total resistance to ground exceeds 29 megaohms, replace hose immediately.

Spray gun: Ground through connection to a properly grounded fluid hose and pump.

Grounding Procedure for Electric Motor

DANGER

HIGH VOLTAGE ELECTRIC SHOCK HAZARD

This equipment uses high voltage power. Improper contact with high voltage equipment will cause death or serious injury.

- Turn off and disconnect power cord before servicing equipment.
- This equipment must be grounded. Connect only to grounded power source.
- Use only 3-wire extension cords for 240V and single phase models
- Use only 5-wire extension cords for 400 AC and three phase models.
- Ensure ground prongs are intact on power and extension cords.
- Do not expose to rain. Store indoors.
- All electrical wiring must be done by a qualified electrician and comply with all local codes and regulations.

The equipment must be grounded to reduce the risk of static sparking and electric shock. An electric or static spark can cause fumes to ignite or explode. An improper ground can cause electric shock. A good ground provides an escape wire for the electric current.

The sprayer cord includes a grounding wire with an appropriate grounding contact.

If using the electric motor, plug must be plugged into an actual outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided; if it does not fit the outlet, have the proper outlet installed by a qualified electrician.

Power Requirements

- 110-120V units require 100-120 VAC, 50/60 Hz, 15A, 1 phase.
- 230V units require 230 VAC, 50/60 Hz, 16A, 1 phase
- 380-400V units require 400 VAC, 50 Hz, 16A, 3 phase, 3P+N+E, 6H power connection
- To operate the EH300DI (24W965) sprayer, the generator needs to be sized for 15 kW output (minimum).

Extension Cords

Use an extension cord with an undamaged ground contact. If an extension cord is necessary, use a 3-wire, 12 AWG (2.5 mm²) minimum.

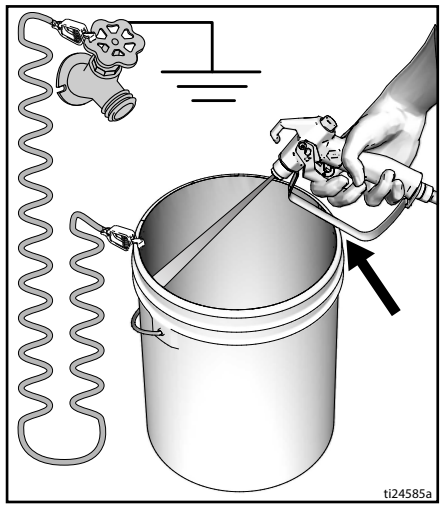
NOTE: Smaller gauge or longer extension cords may reduce sprayer performance.

Grounding of Pails

Solvent pails used when flushing: Follow local code. Use only conductive metal pails, placed on a grounded surface. Do not place the pail on a non-conductive surface, such as paper or cardboard, which interrupts grounding continuity.

Always ground a metal pail: connect a ground wire to the pail. Clamp one end to the pail and the other end to a true earth ground such as a water pipe.

To maintain ground continuity when sprayer is flushed or pressure is relieved: hold metal part of spray gun firmly to the side of a grounded metal pail then trigger the gun.

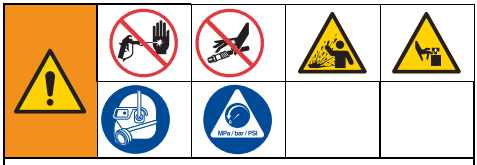


Circuit Protection

Connect sprayers only to circuits which have the properly sized circuit breaker and/or fuses (for unit power requirements see **Technical Data**, pages 60-63).

Pressure Relief Procedure

Follow the **Pressure Relief Procedure** whenever you see this symbol.



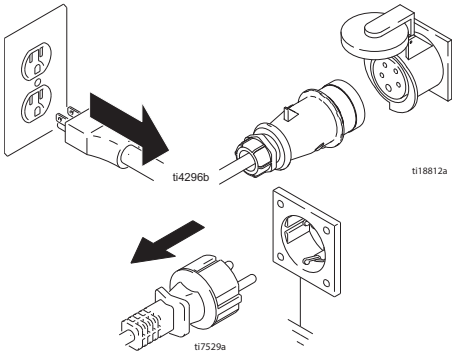
This equipment stays pressurized until pressure is manually relieved. To help prevent serious injury from pressurized fluid, such as skin injection, splashing fluid and moving parts, follow the **Pressure Relief Procedure** when you stop spraying and before cleaning, checking, or servicing the equipment.

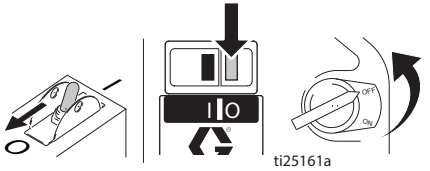
1. Engage trigger lock.
2. Turn gas engine or electric motor ON/OFF switch to OFF. Unplug power cord to electric motor.
3. Move pump valve to OFF and turn pressure control knob fully counterclockwise to lowest setting.
4. Disengage trigger lock. Hold metal part of gun firmly to side of grounded metal pail, and trigger gun to relieve pressure.
5. Engage gun trigger lock.
6. Turn prime valve down to DRAIN position. Leave prime valve down until ready to spray again.
7. If you suspect the spray tip or hose is clogged or that pressure has not been fully relieved:
   a. VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually.
   b. Loosen nut or coupling completely.
   c. Clear hose or tip obstruction.

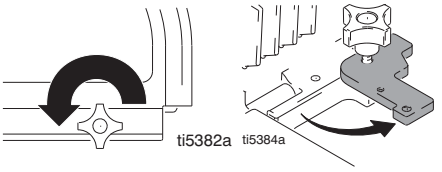
Setup

Change Gas Engine or Electric Motor

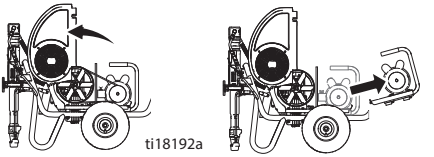
1 Turn motor OFF and unplug or turn engine switch OFF. Loosen belt guard knob and motor clamp. Perform **Pressure Relief Procedure**, page 15.



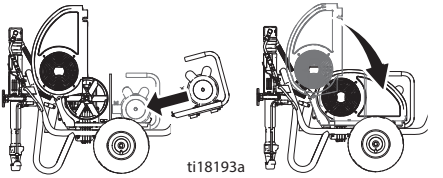




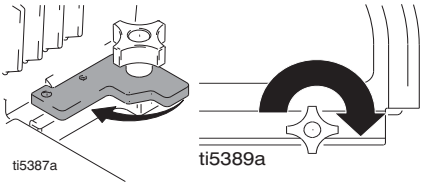
2 Lift belt guard. Remove belt. Tilt engine/motor and remove engine/motor.



3 Tilt engine/motor. Install engine/motor. Install belt. Lower belt guard.

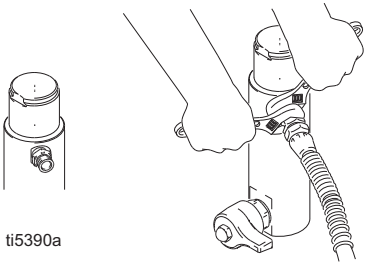


4 Swivel motor clamp. Tighten motor clamp and belt guard knob.

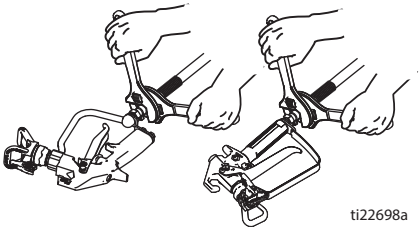


Complete Setup

1. **All sprayers except ProContractor:** Connect appropriate Graco high-pressure hose to sprayer.



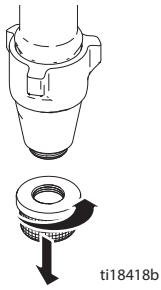
2. Install hose to spray gun and tighten securely.



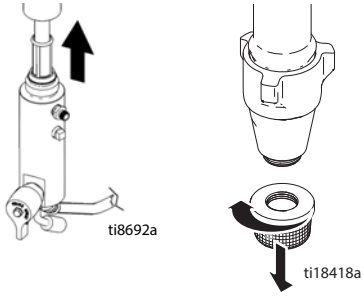
3. Engage gun trigger lock.

4. Remove Tip Guard.

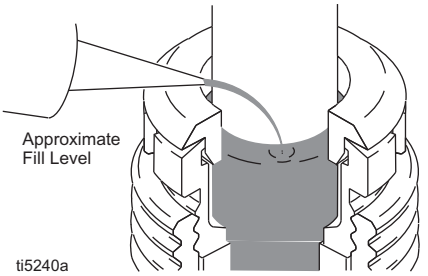
5. **Standard Series:** Screw inlet strainer to bottom of suction hose and hand tighten securely.



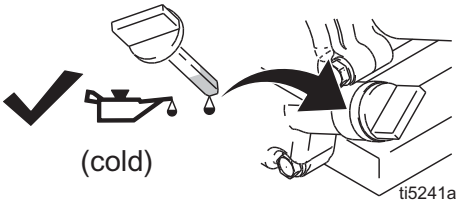
6. When spraying texture, remove inlet strainer and filter bowl screen.



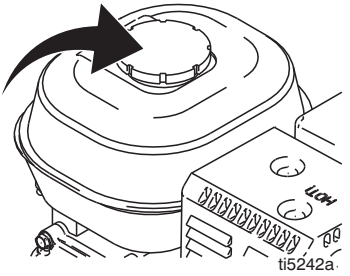
7. Fill throat packing nut with TSL to prevent premature packing wear. Do this each time you spray.



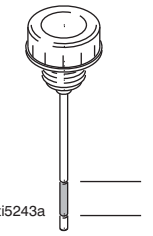
8. Check engine oil level.



9. Fill fuel tank.

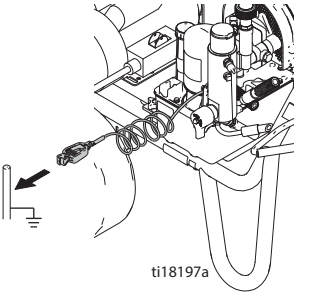


10. Check hydraulic oil level. Add only Graco Hydraulic Oil, ISO Grade 46, 169236 (5 gallon/18.9 liter) or 207428 (1 gallon/3.8 liter). Hydraulic tank capacity is 1.25 gallon (4.75 liters).

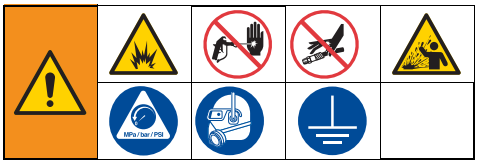


Safe Range (cold)

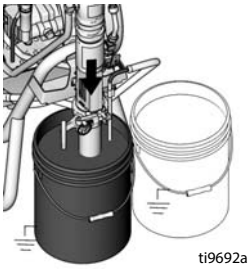
11. Attach sprayer grounding clamp to earth ground.



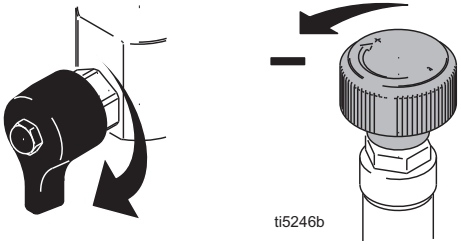
Startup (Gas Models)



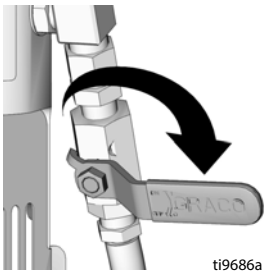
1. Place displacement pump in grounded metal pail partially filled with flushing fluid. Attach ground wire to pail and to earth ground.



2. Turn prime valve down to DRAIN position. Turn pressure control counterclockwise to lowest pressure.

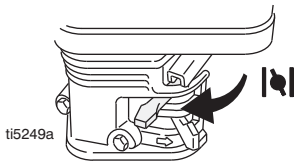


3. Set hydraulic pump valve OFF.

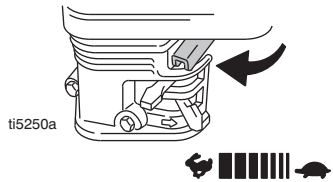


4. Start engine.
   a. Move fuel valve to open.

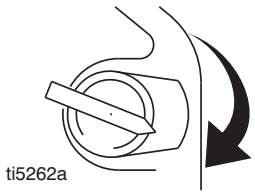
   b. Move choke to closed.



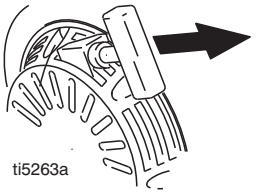
   c. Set throttle to fast.



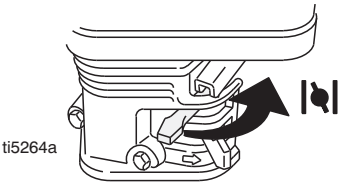
   d. Set engine switch to ON.



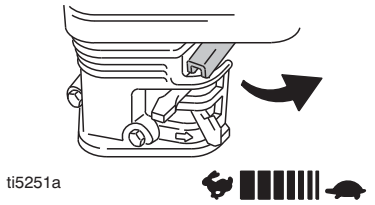
e. Pull starter rope.



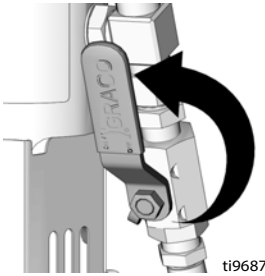
f. After engine starts, move choke to open.



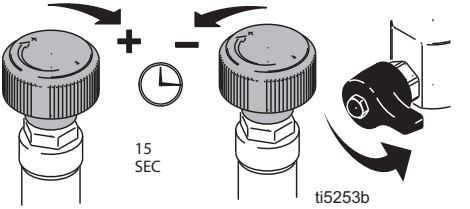
g. Set throttle to desired setting.



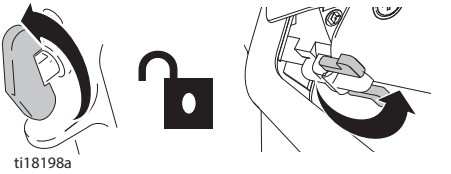
h. Set hydraulic pump valve ON (hydraulic motor is now active).



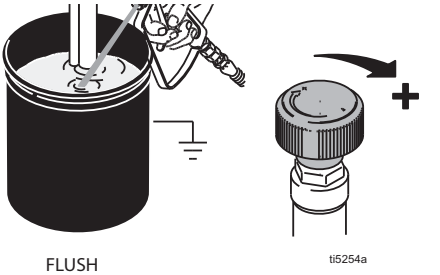
5. Increase pressure enough to start hydraulic motor stroking and allow fluid to circulate for 15 seconds; turn pressure down, turn prime valve horizontal.



6. Disengage spray gun trigger lock.

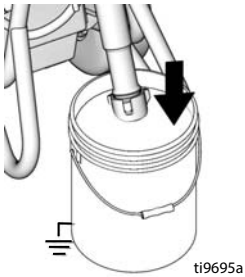


7. Hold gun against grounded metal flushing pail. Trigger gun and increase fluid pressure slowly until pump runs smoothly. Release trigger and allow sprayer to build pressure. Engage trigger lock.

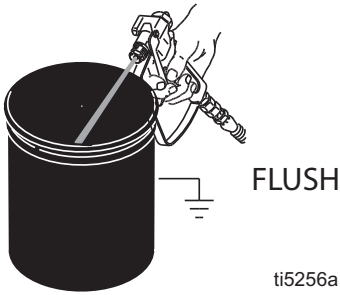


High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.

8. Inspect for leaks. If leaks occur, turn sprayer OFF immediately. Perform **Pressure Relief Procedure**, page 15. Tighten leaky fittings. Repeat **Startup** procedure steps 2-8. If no leaks, continue to trigger gun until system is thoroughly flushed.
9. Place siphon tube in paint pail.



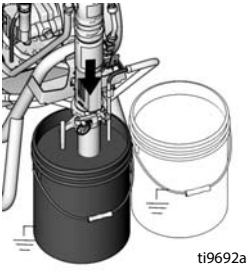
10. Trigger gun again into flushing fluid pail until paint appears.



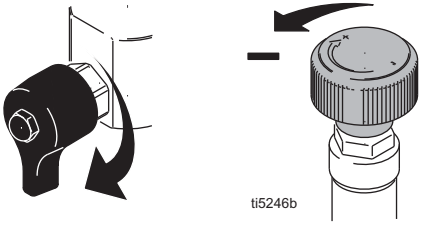
11. Assemble Tip and Guard, page 24.

Startup (Electric Models)

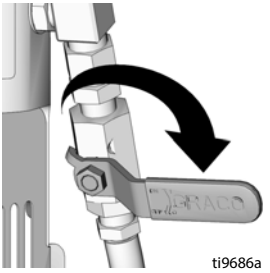
1. Place displacement pump in grounded metal pail partially filled with flushing fluid. Attach ground wire to pail and to earth ground.



2. Turn prime valve down. Turn pressure control counterclockwise to lowest pressure.

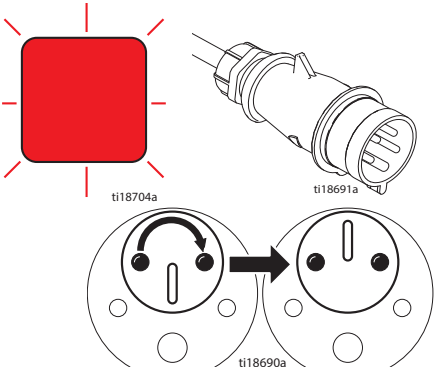


3. Set hydraulic pump valve OFF.

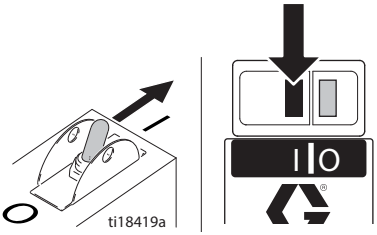


4. Plug cord into outlet.

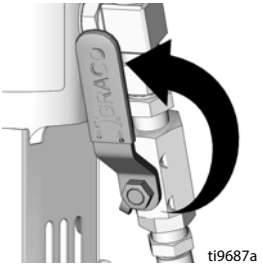
   For three phase electric motors: If red phase sequence light is on, remove plug from outlet and turn phase sequence screw 180°.



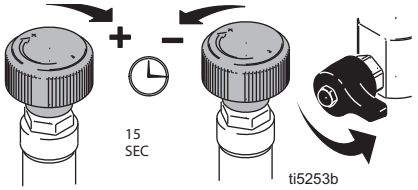
5. Turn motor ON.



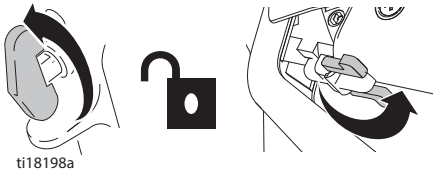
6. Set hydraulic pump valve ON (hydraulic motor is now active).



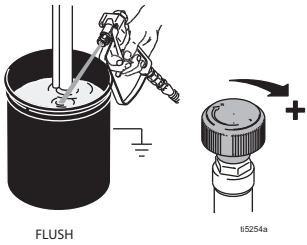
7. Increase pressure enough to start hydraulic motor stroking and allow fluid to circulate for 15 seconds; turn pressure down, turn prime valve horizontal.



8. Take spray gun trigger safety OFF.

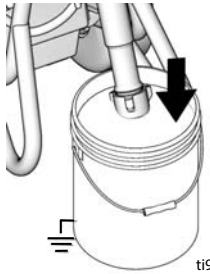


9. Hold gun against grounded metal flushing pail. Trigger gun and increase fluid pressure slowly until pump runs smoothly

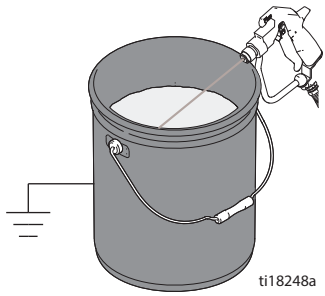


High-pressure spray is able to inject toxins into the body and cause serious bodily injury. Do not stop leaks with hand or rag.

10. Inspect fittings for leaks. If leaks occur, turn sprayer OFF immediately. Perform **Pressure Relief Procedure**, page 15. Tighten leaky fittings. Repeat **Startup** procedure steps 2-8. If no leaks, continue to trigger gun until system is thoroughly flushed.
11. Place displacement pump in paint pail.



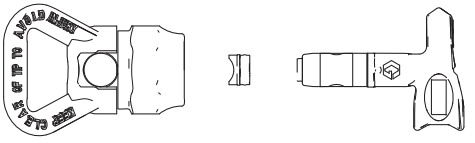
12. Trigger gun again into flushing fluid pail until paint appears.



13. Assemble Tip and Guard, page 24.

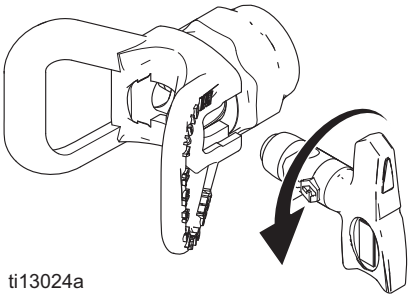
Switch Tip™ and Guard Assembly

1. Perform **Pressure Relief Procedure,** page 15.
2. Engage gun trigger lock. Insert Switch Tip. Insert seat and OneSeal™.



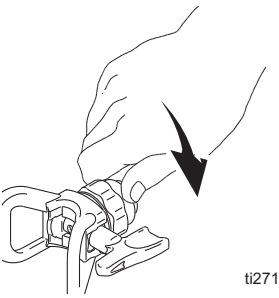
ti13023a

3. Insert Switch Tip and face forward.



ti13024a

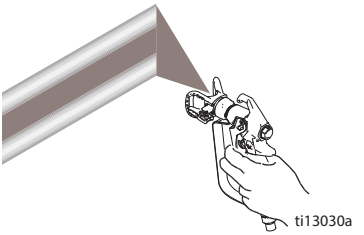
4. Screw assembly onto gun. Tighten.



ti2710a

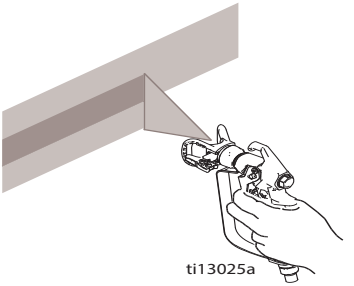
Spray

1. Spray test pattern. Increase pressure to eliminate heavy edges. Use smaller tip size if pressure adjustment can not eliminate heavy edges.



ti13030a

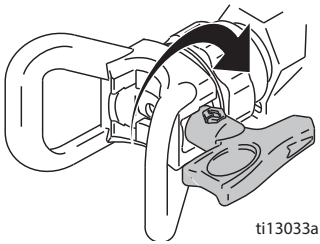
2. Hold gun perpendicular, 10-12 in. (25-30 cm) from surface. Spray back and forth. Overlap by 50%. Trigger gun after moving and release before stopping.



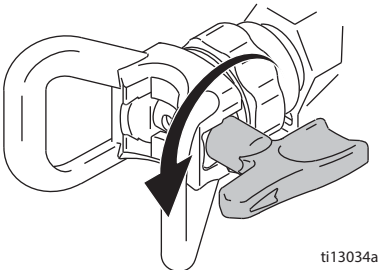
ti13025a

Clear Tip Clogs

1. Release trigger, engage trigger lock. Rotate Switch Tip. Disengage trigger lock. Trigger gun to clear clog.



2. Engage trigger lock. Return Switch Tip to original position. Disengage trigger lock and continue spraying.

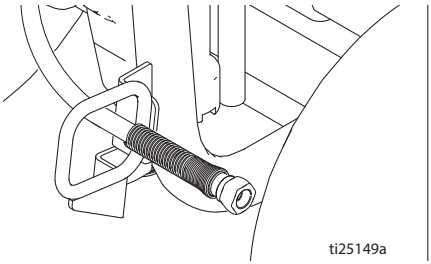


Hose Reel

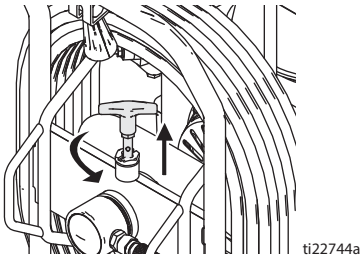
(ProContractor Series only)

To avoid injury, keep your head clear of hose reel while winding up hose.

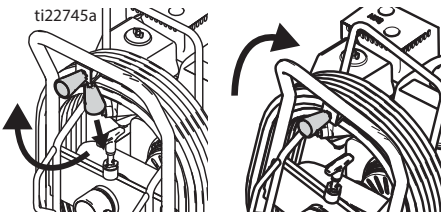
1. Make sure hose is routed through hose guide.



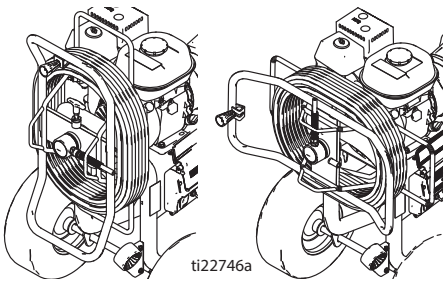
2. Lift and turn pivot lock 90° to unlock hose reel. Pull on hose to remove it from hose reel.



3. Pull reel handle down and turn clockwise to reel in hose.

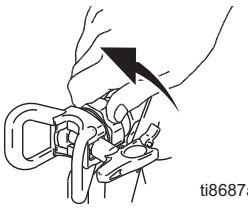


4. **NOTE:** The hose reel can be locked into two positions: Usage and Storage.

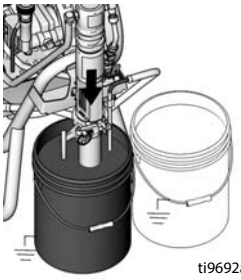


Clean Up

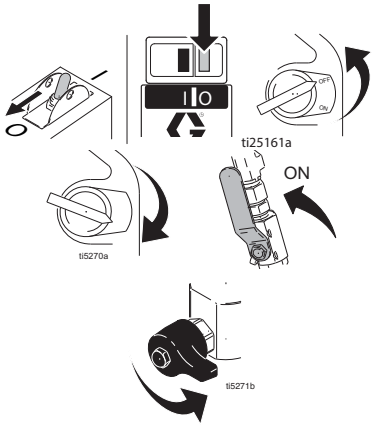
1. Perform **Pressure Relief Procedure**, page 15.
2. Remove Guard and SwitchTip.



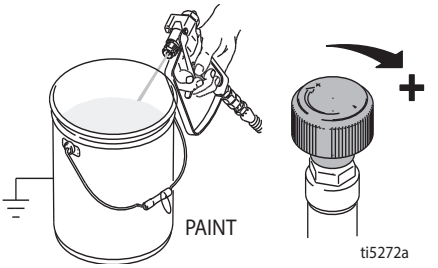
3. Remove displacement pump from paint and place in flushing fluid. Use water for water-based paint and mineral spirits for oil based paint.



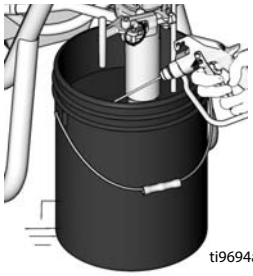
4. Turn motor switch ON or turn engine ON and start engine. Turn hydraulic pump valve ON. Turn prime valve forward to SPRAY position.



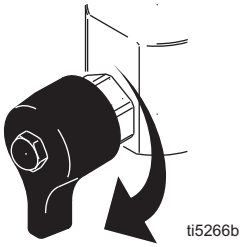
5. Hold gun against pail. Disengage trigger lock. Turn pressure control up until motor begins to drive pump. Trigger gun until flushing fluid appears.



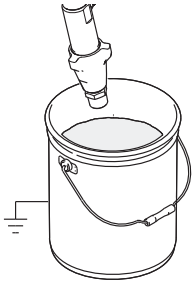
6. Move gun to waste pail, hold gun against pail, trigger gun to thoroughly flush system. Release trigger and engage trigger lock.



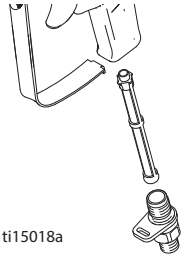
7. While continuing to trigger gun, turn prime valve down. Then release gun trigger. Allow flushing fluid to circulate until fluid comes out of drain tube clear.

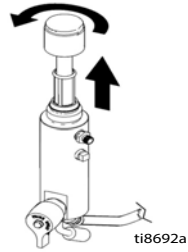


8. Raise displacement pump above flushing fluid and run sprayer for 15 to 30 seconds to drain fluid. Turn hydraulic valve OFF. Turn engine OFF or turn electric motor OFF and unplug.

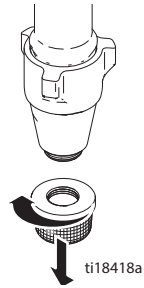


9. Engage trigger lock. Remove filters from gun and sprayer, if installed. Clean and inspect. Reinstall filters.

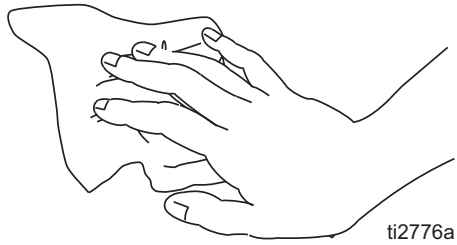




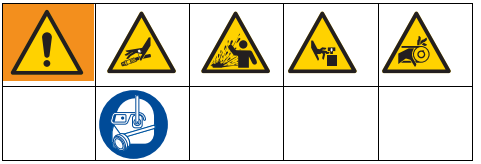
10. Unscrew and remove inlet strainer. Clean and replace strainer if necessary.



11. If flushing with water, flush again with mineral spirits, or Pump Armor, to leave a protective coating to prevent freezing or corrosion.
12. Wipe sprayer, hose and gun with a rag soaked in water or mineral spirits.



Maintenance



NOTE: For detailed engine maintenance and specifications, refer to separate Honda Engines Owner's Manual, supplied.

DAILY: Check engine oil level and fill as necessary.

DAILY: Check hydraulic oil level and fill as necessary.

DAILY: Check hose for wear and damage.

DAILY: Check gun trigger lock for proper operation.

DAILY: Check prime/drain valve for proper operation.

DAILY: Check and fill the gas tank.

DAILY: Check that displacement pump is tight.

DAILY: Check level of Throat Seal Liquid (TSL) in displacement pump packing nut. Fill nut, if necessary. Keep TSL in nut to help prevent fluid buildup on piston rod and premature wear of packings and pump corrosion.

AFTER THE FIRST 20 HOURS OF OPERATION: Drain engine oil and refill with clean oil. Reference Honda Engines Owner's Manual for correct oil grade.

WEEKLY: Remove engine air filter cover and clean element. Replace element, if necessary. If operating in an unusually dusty environment: check filter daily and replace, if necessary.

Replacement elements can be purchased from your local HONDA dealer.

WEEKLY/DAILY: Remove any debris or media from hydraulic rod.

AFTER EACH 100 HOURS OF OPERATION: Change engine oil. Reference Honda Engines Owner's Manual for correct oil viscosity.

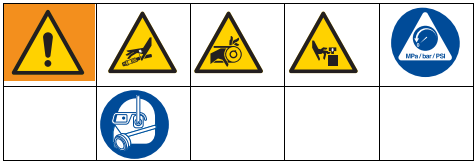
SEMI-ANNUALLY: Check belt wear. Replace if necessary.

YEARLY OR 2000 HOURS: Replace hydraulic oil and filter with Graco hydraulic oil 169236 (5 gallon/20 liter) or 207428 (1 gallon/3.8 liter) and filter 116909.

Replace belt.

SPARK PLUG: Use only BPR6ES (NGK) or W20EPR-U (NIPPONDENSO) plug. Gap plug to 0.028 to 0.031 in. (0.7 to 0.8 mm). use spark plug wrench when installing and removing plug.

Troubleshooting



Problem	Cause	Solution
Gas engine pulls hard (won't start)	Hydraulic pressure is too high	Turn hydraulic pressure knob counterclockwise to lowest setting
Gas engine does not start	Switch OFF, low oil, no gasoline	Consult engine manual
	Fuel shut off valve closed	Open fuel shut off valve
Gas engine does not work properly	Faulty engine	Consult engine manual
	Elevation	Refer to Engine Repair Kit, 4.0 hp - 288678 / 5.5 hp - 248943 / 6.5 hp - 248944 / 9.0 hp - 248945
Electric motor does not start starts slowly	No power	Check power source; check circuit breakers and/or fuses. Reset/replace as required.
	Cord not connected to power source	Connect plug to receptacle (grounded with properly sized circuit breaker and/or fuses).
	Switch OFF	**1 phase motors:** Turn on/off switch to ON. **3 phase motors:** Push ON switch.
	Incorrect power source	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63. **NOTE:** If using the EH300DI sprayer, the generator must be sized for 15 kW output minimum.
	Incorrect amp setting on motor starter (3 phase motor only)	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
	Over current switch has tripped	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
	Hydraulic pressure is too high	Turn hydraulic pressure knob counter clockwise to lowest setting.

Troubleshooting

Problem	Cause	Solution
Electric motor does not work properly	Incorrect power source	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
	Low voltage to motor	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
	3 phase motors: A phase of three phase power has open circuit	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
	Faulty motor	Have a certified electrician or authorized Graco Repair Center evaluate and repair. See **Technical Data**, pages 60-63.
Gas engine / electric motor operates but displacement pump does not operate	Hydraulic pump valve is OFF	Set hydraulic pump valve ON.
	Pressure setting too low	Increase pressure, page 20.
	Displacement pump outlet filter (if used) is dirty or clogged	Clean the filter.
	Tip or tip filter (if used) is clogged	Remove tip and/or filter and clean.
	Hydraulic fluid too low	Shut off sprayer. Add fluid*.
	Belt is off pulley, worn or broken	Replace. See Repair manual.
	Hydraulic pump worn or damaged	Bring sprayer to Graco distributor for repair.
	Dried paint seized paint pump rod	Service pump. See manual 334654
	Hydraulic motor not shifting	Set pump valve OFF. Turn pressure down. Turn engine OFF. Pry rod up or down until hydraulic motor shifts. See Repair manual.
	For 3 Phase electric motor only: Red phase sequence light is ON, indicating motor rotating in the wrong direction	Remove plug from receptacle and rotate plug phase screw. See Operation manual.

PROBLEM	CAUSE	SOLUTION
Displacement pump operates, but output is low on upstroke	Piston ball check not seating properly	Service piston ball check. See manual 334654
	Piston packings worn or damaged	Replace packings. See manual 334654
Displacement pump operates but output is low on downstroke and/or on both strokes	Piston packings worn or damaged	Tighten packing nut or replace packings. See manual 334654
	Intake valve ball check not seating properly	Service intake valve ball check. See manual 334654
	Displacement pump air leak	
Paint leaks and runs over side of wet-cup	Loose wet-cup	Tighten wet-cup enough to stop leakage.
	Throat packings worn or damaged	Replace packings. See manual 334654
Excessive leakage around hydraulic motor piston rod wiper	Piston rod seal worn or damaged	Replace these parts. See Repair manual.
Fluid delivery is low	Pressure setting too low	Increase pressure, see Operation manual.
	Displacement pump outlet filter (if used) is dirty or clogged	Clean filter.
	Hydraulic motor is worn or damaged	Bring sprayer to Graco distributor for repair.
	Large pressure drop in fluid hose	Use larger diameter or shorter hose.
Sprayer overheats	Paint build up on hydraulic components	Clean hydraulic components.
	Oil level is low	Fill with oil. See Operation manual.
	Inlet to hydraulic pump pulley/cooling fan is obstructed	Remove obstructions.
	Inlet to 3 phase electric motor cooling fan is obstructed.	Remove obstructions.
Spitting from gun	Air in fluid pump or hose	Check for loose connections on siphon assembly, tighten, then reprime pump.
	Fluid supply is low or empty	Refill supply container.
Excessive hydraulic pump noise	Low hydraulic fluid level	Turn sprayer OFF. Add fluid*.
	Air in hydraulic lines	Bleed lines. See Repair manual.

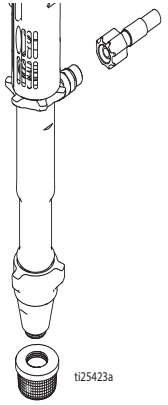
*Check hydraulic fluid level often. Do no allow it to become too low. Use only Graco approved hydraulic fluid, page 18.

Standard Series Pump

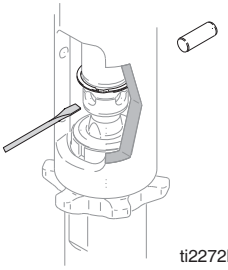
Removal

See pump manual 334654 for pump repair.

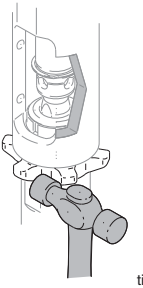
1. Flush pump.
2. Perform **Pressure Relief Procedure**, page 15.
3. Remove strainer and paint hose.



4. Push retaining ring up; push out pin.



5. Loosen jam nut. Unscrew pump.

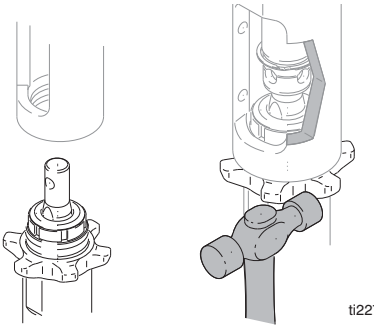


Installation

NOTICE

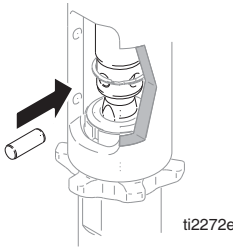
If pump jam nut loosens during operation, the threads of the bearing housing and drive train will be damaged. Tighten jam nut as specified.

1. Screw jam nut to bottom of pump threads. Screw pump completely into manifold. Unscrew pump from manifold until pump outlet aligns with hose. Hand tighten jam nut, then tap 1/8 to 1/4 turn with hammer.

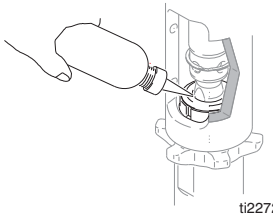


If pin is loose, parts could break off and project through the air, resulting in serious injury or property damage. Make sure pin is properly installed.

2. Slowly pull engine starter rope until pump rod pin hole is aligned with hydraulic rod hole. Push pin into hole. Push retaining ring into groove.



3. Fill packing nut with Graco TSL.

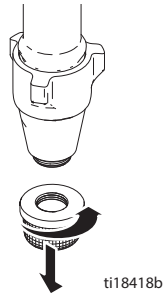


ProContractor Series Pump

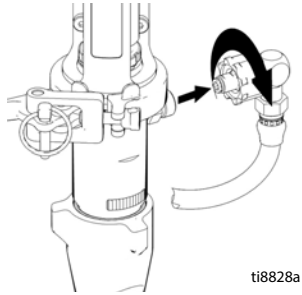
Removal

See pump manual 334654 for pump repair.

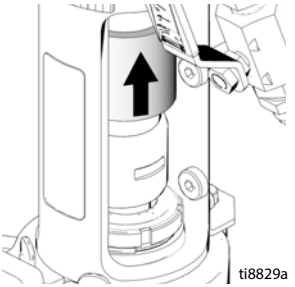
1. Flush pump.
2. Perform **Pressure Relief Procedure**, page 15.



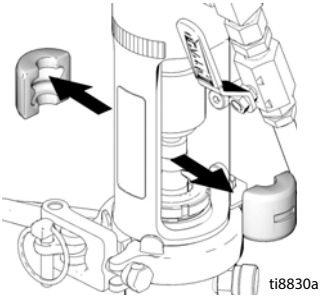
3. Remove paint hose fitting and paint hose from pump fitting.



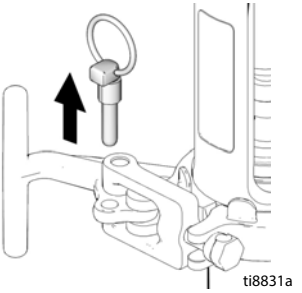
4. Slide coupler cover up to fully expose rod couplers.



5. Remove rod couplers.

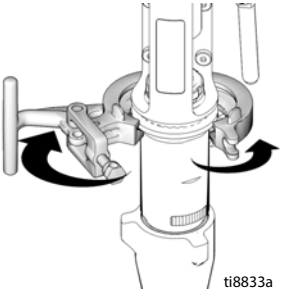


6. Remove pin.

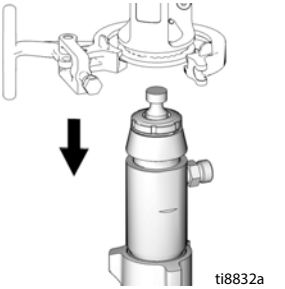


NOTE: Support pump with your hand before opening t-handle.

7. Open clamp.

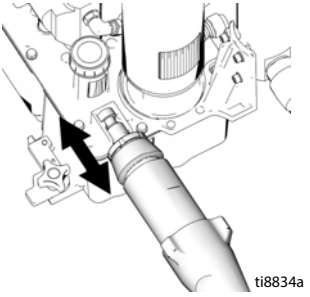


8. Remove pump from unit.



Installation

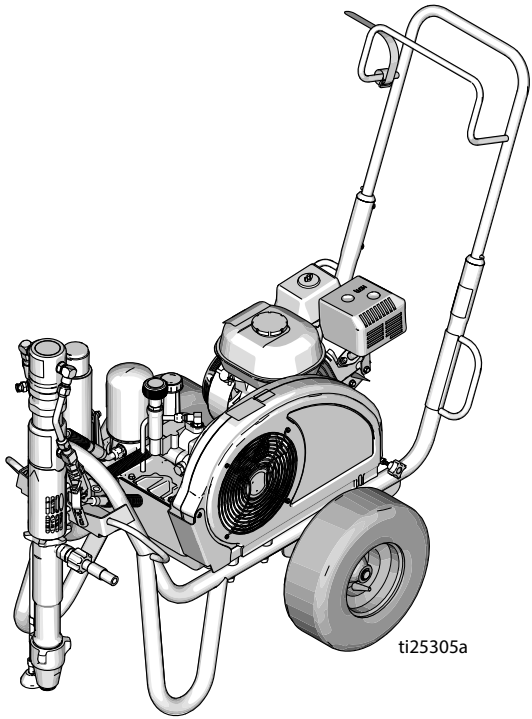
1. If needed, place pump rod in adjustment casting and pull pump to extend rod.



2. Reverse removal steps to reassemble pump.

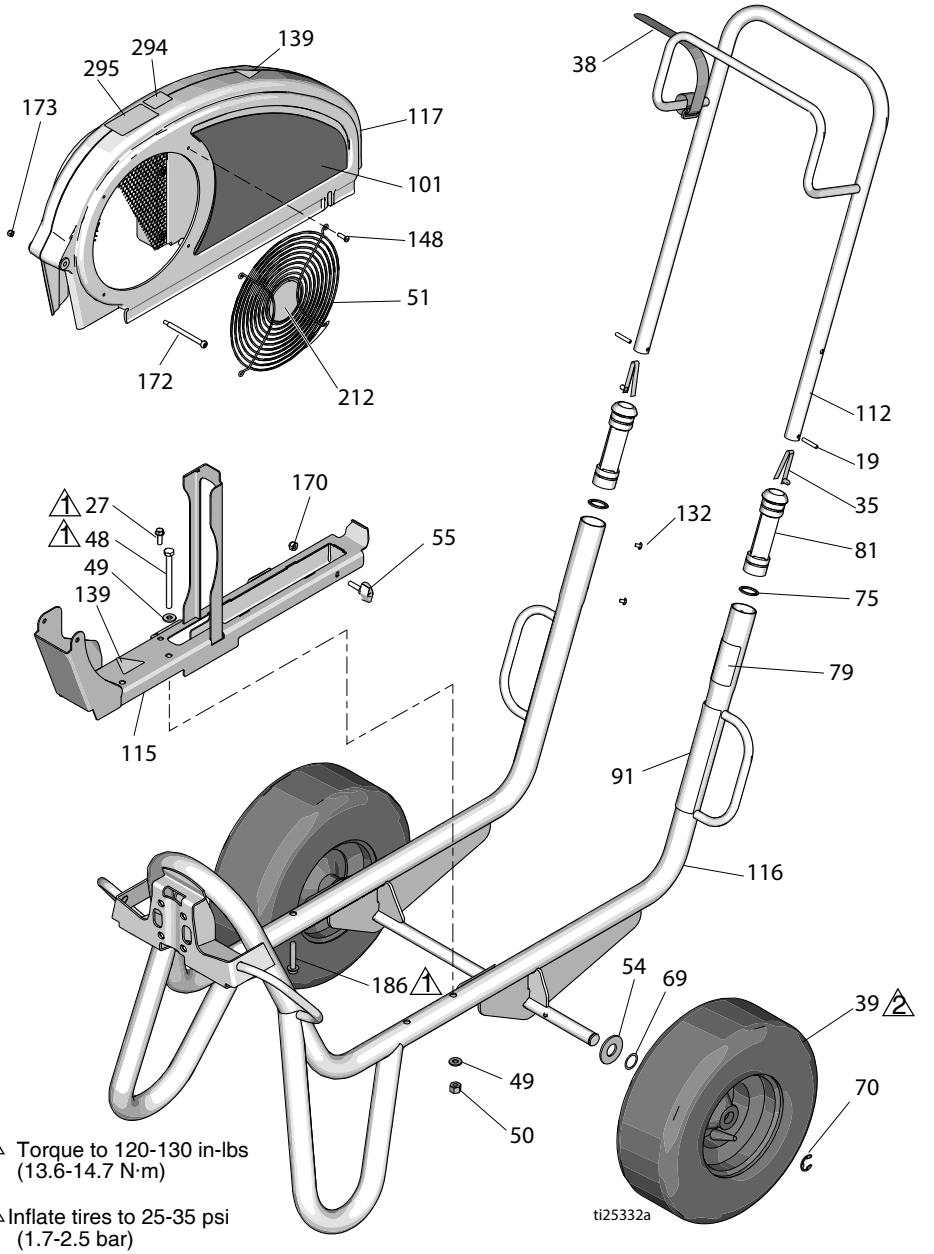
Parts

DutyMax EH/GH™230/300 Standard Series



Parts - Frame and Belt Guard

DutyMax GH™230/300 Standard Series



1 Torque to 120-130 in-lbs (13.6-14.7 N·m)

2 Inflate tires to 25-35 psi (1.7-2.5 bar)

Parts List

Ref.	Part	Description	Qty.
19	101354	PIN, spring, straight	2
27	260212	SCREW, hex washer hd, thd form	1
35	112827	BUTTON, snap	2
38	114271	STRAP, retaining	1
39	119509	WHEEL, pneumatic	2
48	867539	SCREW, cap, hex hd	2
49	100527	WASHER, plain	4
50	110838	NUT, lock	2
51	117284	GRILL, fan guard	1
54	156306	WASHER, flat	2
55	17D813	NUT, hand	2
69	116038	WASHER, wave spring	2
70	120211	RING, retaining, e-ring	2
75	15J645	WASHER	2
79▲	189246	LABEL, warning	1
	17D947	LABEL, warning, multi-languages	1
81	192027	SLEEVE, cart	2
91▲	194317	LABEL, warning	1
	16N948	LABEL, warning, ISO	1
	17D947	LABEL, warning, multi-languages	1
101	17D042	LABEL, brand, side (EH200DI)	1
	17D044	LABEL, brand, side (GH200DI)	1
	17D046	LABEL, brand, side (EH300DI)	1
	17D048	LABEL, brand, side (GH300DI)	1
112	24M397	HANDLE, cart	1
115	24M086	RAIL, belt gaurd, assy	1
116	24M085	FRAME, cart, weldment	1
117	248973	GUARD, belt assembly, painted (includes 51, 148, 172, 173)	1
132	109032	SCREW, mach, pnh	4
139▲	16M768	LABEL, warning	2
141▲	15Y963	LABEL, read instructions	1
148	115477	SCREW, mach, torx pan hd	4
170	102040	NUT, lock, hex	1
172	119434	SCRWE, shoulder, skt hd	1
173	116969	NUT, lock	1
212	16N398	LABEL, direction (EH/GH300DI)	1
294	16D576	LABEL, made in USA	1
295	16X983	LABEL, standard series	1

▲*Danger and Warning labels are available at no cost.*

Parts - Electric Motor

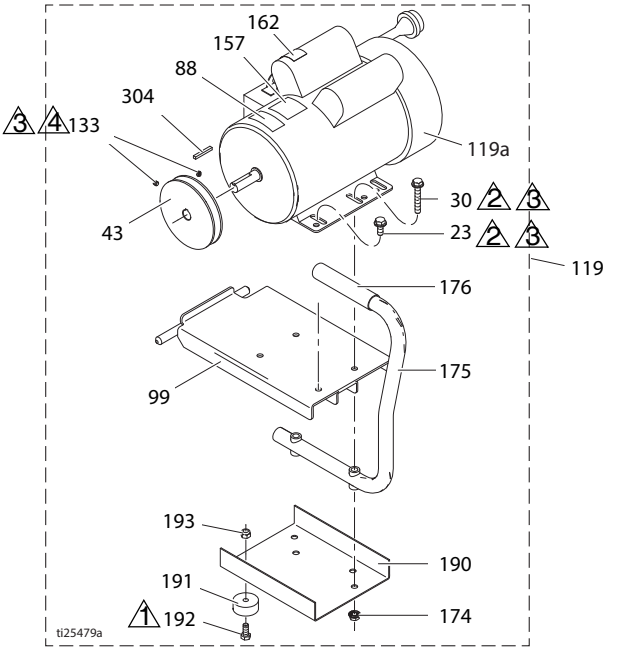
DutyMax EH™230DI Models

1 Torque to 26-30 in-lbs (2.9-3.4 N·m)

2 Torque to 215-235 in-lbs (24.3-26.6 N·m)

3 Loctite 242

4 Torque to 58-62 in-lbs (6.6-7.0 N·m)



Parts List - Electric Motor (DutyMax EH™230DI Models)

Ref.	Part	Description	Qty.
23	110963	SCREW, cap, flange head	2
30	114653	SCREW, cap, flange head	2
43	16N612	PULLEY	1
44	116914	BELT, V-Gripnotch (not shown)	1
88▲	15K616	LABEL, caution	1
99	15E585	BRACKET, mounting, elec. motor	1
119	24M668	KIT, 3.0 hp (includes all parts listed on this page)	1
119a	15E669	MOTOR, electric 3 HP, 230V AC	1
133	100002	SCREW, set	2
157	15B804	LABEL, Graco	2
162▲	189930	LABEL, warning	1
174	110996	NUT, hex, flange head	4
175	246214	HANDLE, conversion	1
176	111700	GRIP, handle	1
190	15F217	PLATE, isolator, bottom	1
191	113817	BUMPER	4
192	100057	SCREW, cap, hex hd	4
193	111040	NUT, lock, insert, nylock, 5/16	4
304	117632	KEY, square 3/16 x 1.25	1

▲*Danger and Warning labels are available at no cost*

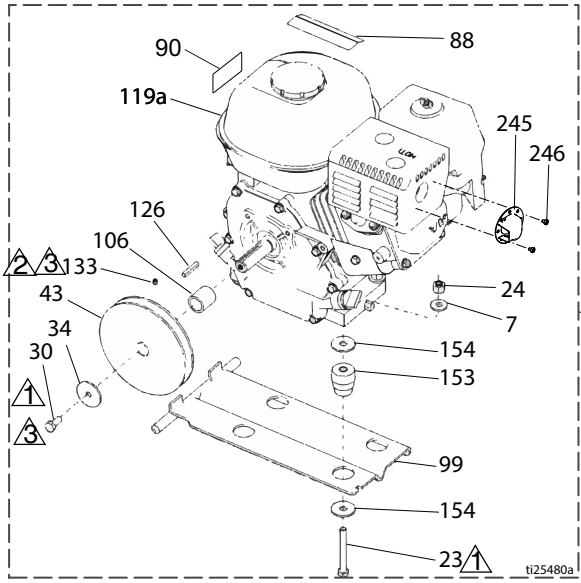
Parts - Gas Engine

DutyMax GH™230DI Models

1 Torque to 120-130 in-lbs (13.6-14.7 N·m)

2 Torque to 58-62 in-lbs (6.6-7.0 N·m)

3 Loctite 242



Parts List - Gas Engine (DutyMax GH™230DI Models)

Ref.	Part	Description	Qty.
7	100023	WASHER, flat	4
23	113664	SCREW, cap, hex hd	4
30	108842	SCREW, cap, hex hd	2
34	112717	WASHER	1
43	116908	PULLEY, 5.50 in.	1
44	119433	BELT, V-Gripnotch (not shown)	1
50	110838	NUT, lock	4
88▲	194126	LABEL, warning	1
90▲	16Y720	LABEL, warning, ISO engine	1
99	15F157	BRACKET, mounting, engine	1
106	15B314	SLEEVE, motor shaft	1
119	248944	KIT, gas engine 6.5 hp (includes all parts listed on this page)	2
119a	116298	ENGINE, 6.5 gas	1
126	117632	KEY, square, 3/16 x 1.25	1
133	100002	SCREW, set	1
153	15E888	DAMPENER, motor mount	4
154	108851	WASHER, plain	8
245	128099	DEFLECTOR, exhaust	1
246	128101	SCREW, tapping	2

▲*Danger and Warning labels are available at no cost*

Parts - Electric Motor

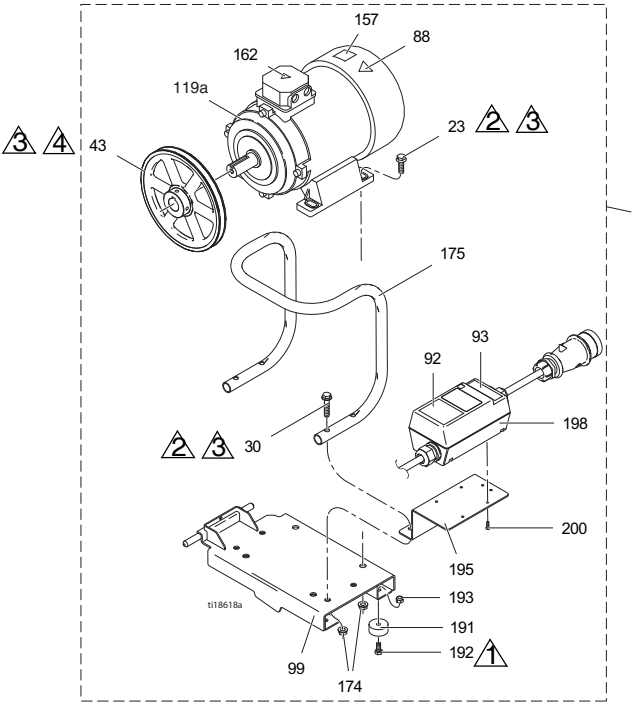
DutyMax EH™300DI Models

1 Torque to 26-30 in-lbs (2.9-3.4 N·m)

2 Torque to 215-235 in-lbs (24.3-26.6 N·m)

3 Loctite 242

4 Torque to 58-62 in-lbs (6.6-7.0 N·m)



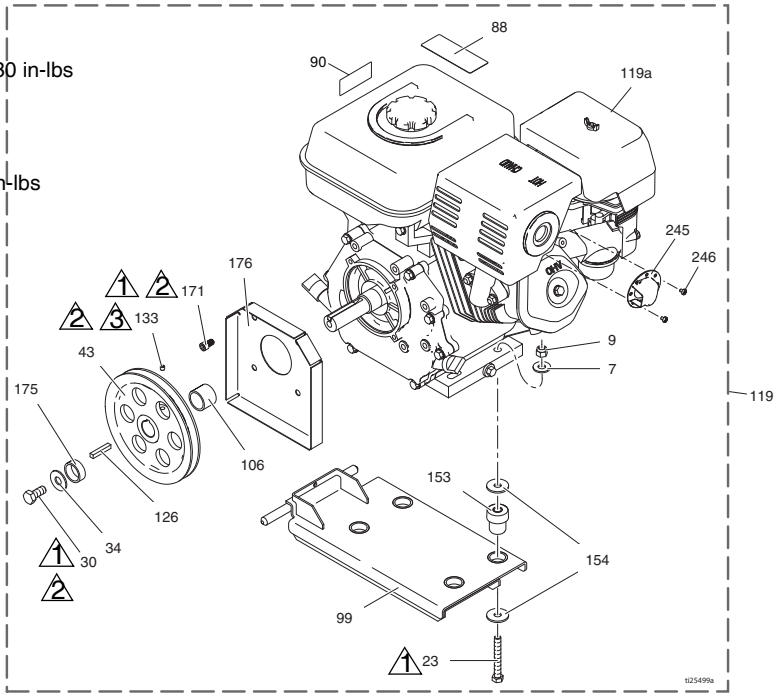
Parts List - Electric Motor (DutyMax EH™300DI Models)

Ref.	Part	Description	Qty.
23	111193	SCREW, cap, flange head	4
30	116780	SCREW, hex, hd, flanged	4
43	125811	PULLEY, cast iron, 8.75 in	1
88▲	15K616	LABEL, caution	1
92	16N399	LABEL, motor switch box on-off	1
93	16N400	LABEL, red light indicator	1
99	16M467	BRACKET, mounting, motor, EH300	1
119	24M669	KIT, motor (includes all parts listed on this page)	1
119a	24N019	MOTOR, elec., 400 VAC, 50 Hz, 7.3 hp	1
162▲	189930	LABEL, caution	1
174	112958	NUT, hex, flanged	8
175	16M473	TUBE, handle, conversion	1
191	113817	BUMPER	4
192	100057	SCREW, cap, hex hd	4
193	111040	NUT, lock, insert, nylock, 5/16	4
195	16M474	BRACKET, motor starter	1
198	24N064	STARTER, motor assembly	1
200	119236	SCREW, plastite	4

▲*Danger and Warning labels are available at no cost*

Parts - Gas Engine

DutyMax GH™300DI Models



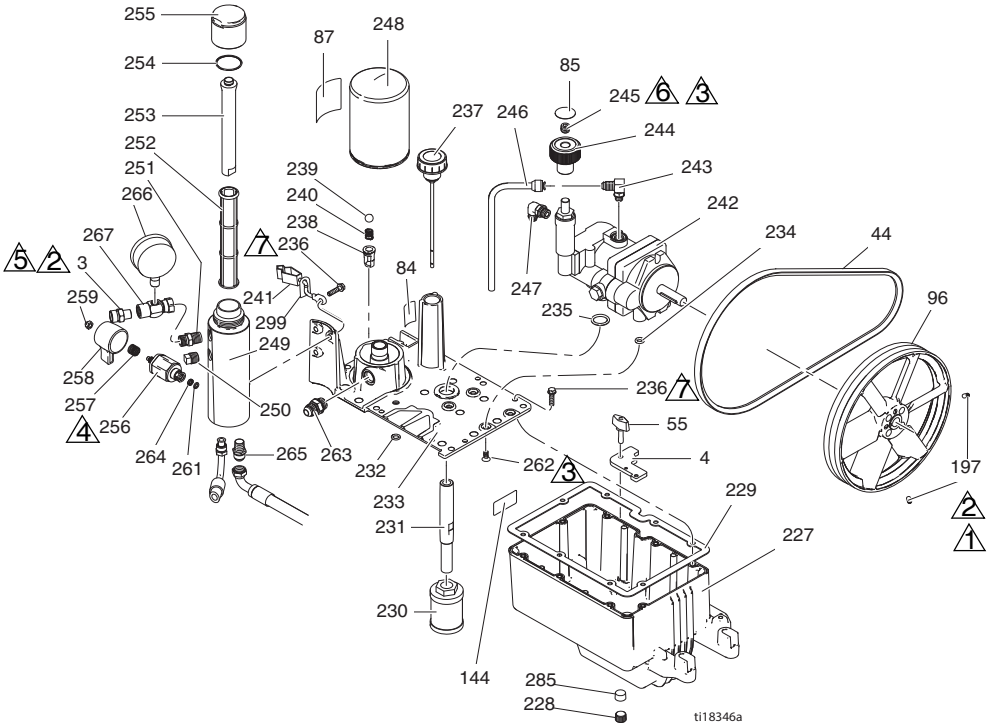
Parts List - Gas Engine (DutyMax GH™300DI Models)

Ref.	Part	Description	Qty.
7	100132	WASHER, flat	4
9	101566	NUT, lock	4
23	106212	SCREW, cap, hex hd	4
30	116645	SCREW, cap, hex head	1
34	100696	WASHER, wrought	1
43	119401	PULLEY	1
44	119432	BELT, V-Gripnotch (not shown)	1
88▲	194126	LABEL, warning	1
90▲	16Y720	LABEL, warning, ISO engine	1
99	15E583	BRACKET, mounting, engine	1
106	15E586	SLEEVE, shaft, engine	1
119	248945	KIT, gas engine 9.0 hp (includes all parts listed on this page)	2

Ref.	Part	Description	Qty.
119a	803900	ENGINE, gasoline, 9.0 hp (Honda)	1
126	119484	KEY, parallel, square	1
133	100002	SCREW, set	1
153	195515	DAMPENER, motor mount	4
154	108851	WASHER, plain	8
171	C20010	SCREW, cap, socket head	4
175	15E764	SPACER, shaft, engine	1
176	15E973	SHIELD, engine shaft	1
245	124145	DEFLECTOR, exhaust	1
246	128101	SCREW, tapping	3

▲*Danger and Warning labels are available at no cost*

Parts - Reservoir and Filter



1 Torque to 58-62 in-lbs (6.6-7.0 N·m)

2 Loctite 242

3 Torque to 90-110 in-lbs (10.2-12.4 N·m)

4 Torque to 335-395 in-lbs (37.9-44.6 N·m)

5 Torque to 15-25 in-lbs (1.7-2.8 N·m)

6 Loctite 277

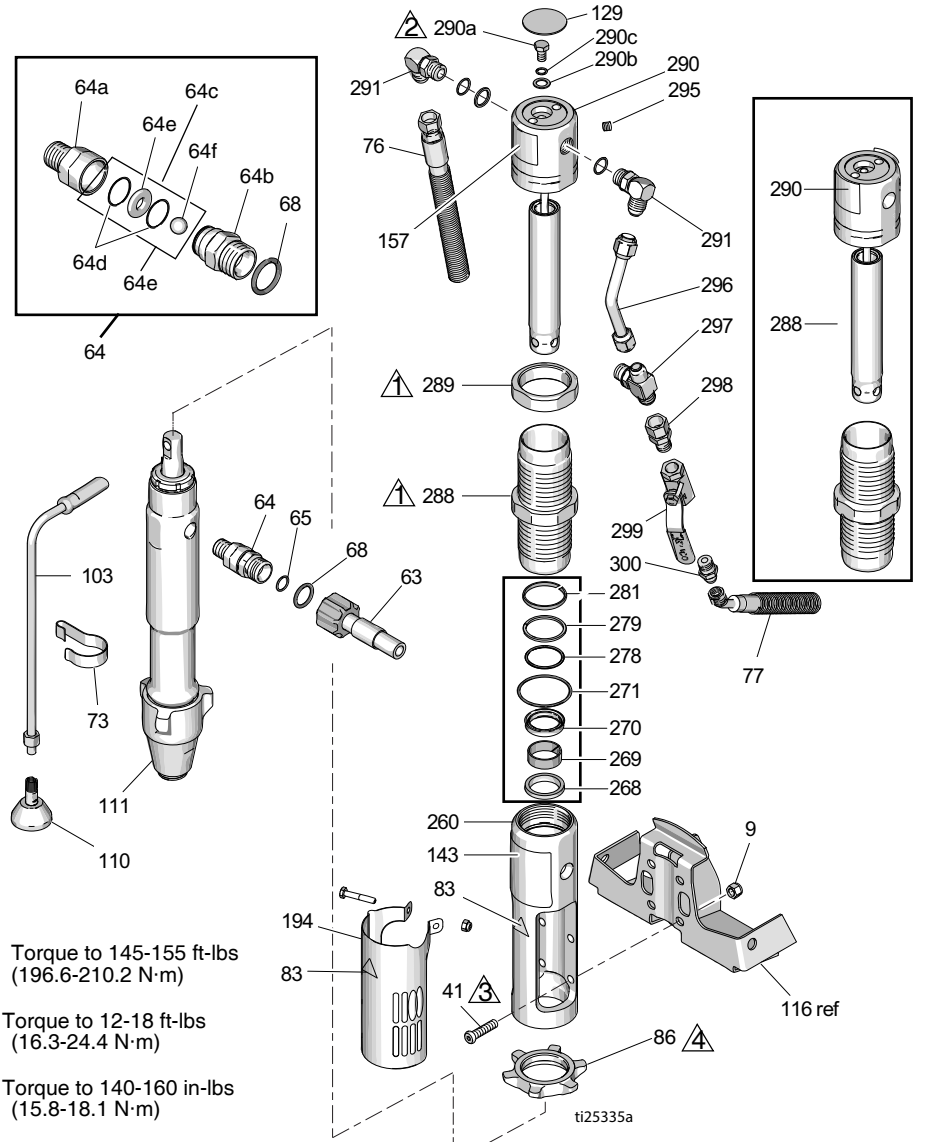
7 Torque to 110-120 in-lbs (12.4-13.6 N·m)

Parts List - Reservoir and Filter

Ref.	Part	Description	Qty.
3	196178	FITTING, outlet (EH/GH230DI)	1
	183285	FITTING, outlet, (EH/GH300DI)	1
4	15E476	BRACKET, retainer, motor	1
44	116914	BELT, V, AX42 (EH230DI)	1
	119433	BELT, V, AX41 (GH230DI)	
	125834	BELT, V, AX48 (EH300DI)	1
	119432	BELT, V, AX44 (GH300DI)	1
55	15D862	NUT, hand	2
84	198585	LABEL, hydraulic fluid, GH	1
85	15A464	LABEL, control	1
87	189892	LABEL, Graco	1
96	15E410	PULLEY, fan	1
144	15K440	LABEL, brand, GH/EH cooling	1
197	120087	SCREW, set, 1/4 x 1/2	2
227	15J513	TANK, reservoir, blue	1
228	101754	PLUG, pipe	1
229	120604	GASKET, reservoir	1
230	116919	FILTER	1
231	15E587	TUBE, suction	1
232	154594	PACKING, o-ring	1
233	15M056	COVER, reservoir	1
234	107188	PACKING, o-ring	4
235	156401	PACKING, o-ring	1
236	119426	SCREW, mach, hex washer hd	11
237	120726	CAP, breather, filter	1
238	198841	RETAINER, ball, pressure bypass	1
239	100084	BALL, metallic	1
240	116967	SPRING, compression	1
241	237686	WIRE, ground assembly w clamp	1
242	249003	PUMP, hydraulic (EH/GH230DI)	1
243	110792	FITTING, elbow, male, 90°	1
244	15B438	KNOB, pressure	1
245	117560	SCREW, set, socket head	1
246	245167	TUBE, hydraulic, case drain	1
247	120634	FITTING, elbow, hydraulic w/o rings	1
248	246173	FILTER, oil, spin on	1
249	15E599	HOUSING, filter	1
250	15G331	PLUG, pipe	1
251	196178	ADAPTER, nipple	1
252	244067	FILTER, fluid	1
253	16C766	TUBE, diffusion	1
254	117285	PACKING, o-ring	1
255	16C765	CAP, filter	1
256*	287879	VAVLE, drain, assy	1
257*	114708	SPRING, comp	1
258*	15G563	HANDLE, valve	1
259*	116424	NUT, cap	1
261*	193710	SEAL, seat, valve	1
262	117471	SCREW, mach, hex flat head	4
263	120184	FITTING, hydraulic	1
264*	193709	SEAT, valve	1
265	121311	FITTING, elbow, 45° street	1
266	102814	GAUGE	1
267	243683	UNION, swivel	1
285	116618	MAGNET	1
299	290079	LABEL, ground warning, English	1
	16Y633	LABEL, ground warning, Chinese	1

** Included in Drain Valve Kit 245103*

Parts - Hydraulic Motor and Displacement Pump



1 Torque to 145-155 ft-lbs (196.6-210.2 N·m)

2 Torque to 12-18 ft-lbs (16.3-24.4 N·m)

3 Torque to 140-160 in-lbs (15.8-18.1 N·m)

4 Torque to 70-80 ft-lbs (94.9-108.5 N·m)

Parts List - Hydraulic Motor and Displacement Pump

Ref.	Part	Description	Qty.
8	15F584	LABEL, ProConnect	1
9	101566	NUT, lock	4
33	189920	STRAINER, (1-11 1/2 npsm)	1
41◆	107210	SCREW	4
57	288344	CLAMP, pump	1
58	105510	WASHER, lock, spring (hi-collar)	2
59	101550	SCREW, cap, sch	2
63	257908	HOSE, coupled	1
64	24M611	KIT, check valve (includes 64a -64f)	1
64a	16N461	HOUSING, seat, check valve	1
64b	16N462	HOUSING, ball, check valve	1
64c	24M725	KIT, repair, check valve (includes 64d, 64e, 64f, 68)	1
64d*		O-RING	2
64e*		SEAT, valve	1
64f*		BALL, ceramic	1
65	109450	PACKING, o-ring	1
68*	C20195	PACKING, o-ring	1
73	198542	CLIP, spring	1
76	15K642	HOSE, hydraulic, return	1
77	15K641	HOSE, hydraulic, supply	1
83▲◆	192840	LABEL, warning	1
86	193394	NUT, retaining, GH230/300	1
103	243993	HOSE, drain, Ultra hi-boy	1
110	241920	DEFLECTOR, threaded	1
111	24W999	PUMP, displacement	1
129◆	15B063	LABEL, warning	1
143	17D061	LABEL, brand, front (EH230DI)	1
	17D063	LABEL, brand, front (GH230DI)	1
	17D065	LABEL, brand, front (EH300DI)	1
	17D067	LABEL, brand, front (GH300DI)	1
157◆	15B804	LABEL, Graco	2
178	156698	PACKING, o-ring	1
179	277377	COUPLER, pump	2
180	15H957	COVER, coupler	1
194	24X474	COVER, shield	1
260◆	15E243	MANIFOLD, adapter	1
268◆+	117739	WIPER, rod	1
269◆+	112342	BEARING, rod	1
270◆+	112342	PACKING, block	1
271◆+	117283	PACKING, o-ring	1
278◆+	108014	PACKING, o-ring	1
279◆+	178226	SEAL, piston	1
281◆+	178207	BEARING, piston	1
288◆	248991	SLEEVE, hydraulic	1
289◆	15A726	NUT, jam	1
290◆	288737	KIT, repair, tripod (includes 129, 278, 279, 281, 282, 295)	1
290a◆	106276	SCREW, cap, hex head	1
290b◆	155685	PACKING, o-ring	1
290c◆	178179	WASHER, sealing	1
291◆	117607	FITTING, elbow std thd	2
295◆	100139	PLUG, pipe	1
296◆	15E596	TUBE, hydraulic, supply	1
297◆	117609	FITTING, tee, branch, str thd	1
298	117328	FITTING, nipple, straight	1
299	117441	VALVE, ball	1
300	116813	FITTING, nipple, hydraulic	1

▲ *Danger and Warning labels are available at no cost*

◆ *Included in Hydraulic Motor Repair Kit 288760 (EH/GH300).*

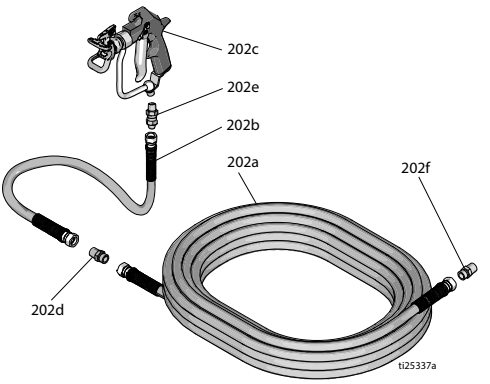
+ Included in Seal Kit 246174

** Included in Check Valve Repair Kit 24M725*

Parts

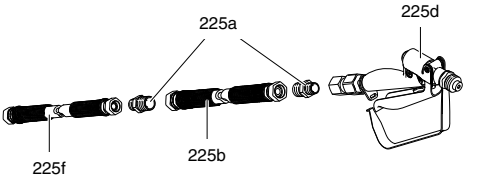
DutyMax EH/GH™230DI Sprayer - Spray Gun and Hose

Ref.	Part No.	Description	Qty.
202a	240797	HOSE, grounded, nylon; 3/8 in. ID; cpld 3/8-18 npsm; 50 ft (15 m); spring guards both ends	1
202b	241735	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npt(m) x 1/4 npsm(f); 3 ft (0.9m); spring guards both ends 3300 psi (227 bar, 22.7 MPa)	1
202c	241705	GUN, spray, texture, Includes RAC© Tip Guard and LTX531 Spray Tip Cylinder, See 308491 for parts	1
202d	159841	ADAPTER, 3/8 x 1/4 in. npt	1
202e	239663	SWIVEL, straight	1
202f	196178	ADAPTER, nipple	1



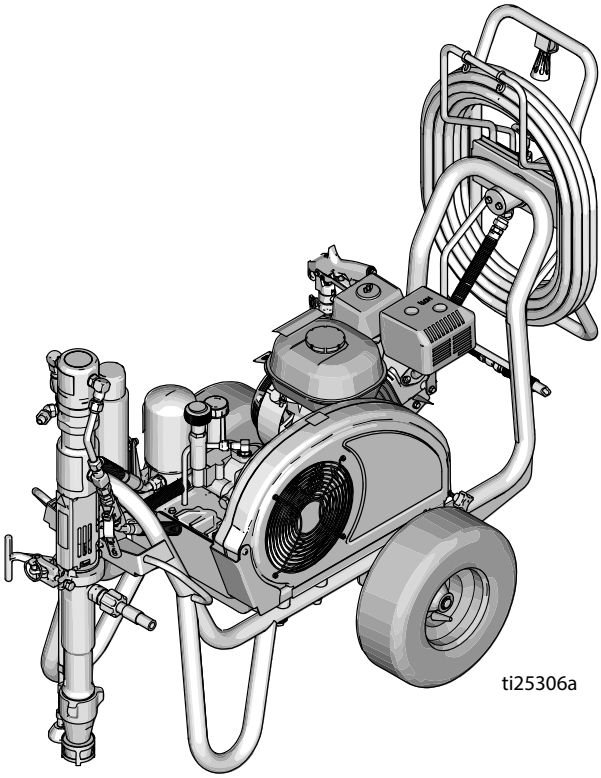
DutyMax EH/GH™300DI Sprayer - Spray Gun and Hose

Ref.	Part No.	Description	Qty.
225a	159239	FITTING, nipple, pipe, rdcg	2
225b	191239	HOSE, cpld, 3/8 in. x 11 ft 10 in.	1
225d	245820	KIT, accessory, gun	1
225f	278499	HOSE, cpld, 1/2 in. x 50 ft, 3300 wp	1



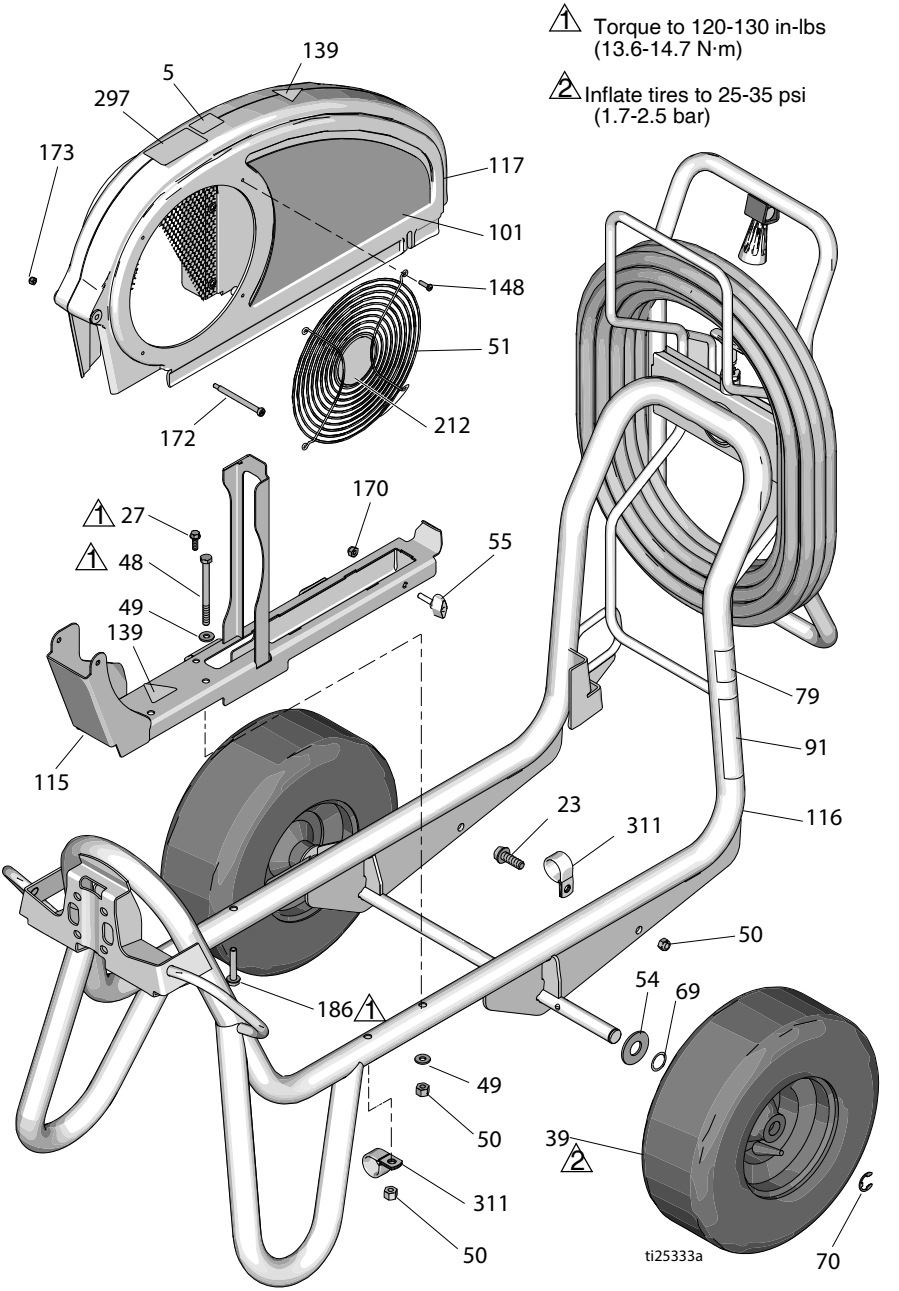
Parts

DutyMax EH/GH™230/300 ProContractor Series



Parts - Frame and Belt Guard

DutyMax GH™230/300 ProContractor Series



Parts List

Ref.	Part	Description	Qty.
5	16D576	LABEL, made in USA with global component	1
19	101354	PIN, spring, straight	2
23	110963	SCREW, cap, flange head	1
27	260212	SCREW, hex washer hd, thd form	1
35	112827	BUTTON, snap	2
38	114271	STRAP, retaining	1
39	119509	WHEEL, pneumatic	2
48	867539	SCREW, cap, hex hd	2
49	100527	WASHER, plain	4
50	110838	NUT, lock	2
51	117284	GRILL, fan guard	1
54	156306	WASHER, flat	2
55	17D813	NUT, hand	2
69	116038	WASHER, wave spring	2
70	120211	RING, retaining, e-ring	2
75	15J645	WASHER	2
79▲	189246	LABEL, warning	1
81	192027	SLEEVE, cart	2
91▲	194317	LABEL, warning	1
	16N948	LABEL, warning, ISO	1
	17D947	LABEL, warning, multi-languages	1
101	17D042	LABEL, brand, side (EH230DI)	1
	17D044	LABEL, brand, side (GH230DI)	1
	17D046	LABEL, brand, side (EH300DI)	1
	17D048	LABEL, brand, side (GH300DI)	1
115	24M086	RAIL, belt gaurd, assy	1
116	17D108	FRAME, cart, weldment	1
117	248973	GUARD, belt assembly, painted	1
132	109032	SCREW, mach, pnh	4
139▲	16M768	LABEL, warning	2
141▲	15Y963	LABEL, read instructions	1
148	115477	SCREW, mach, torx pan hd	4
170	102040	NUT, lock, hex	1
172	119434	SCRWE, shoulder, skt hd	1
173	116969	NUT, lock	1
212	16N398	LABEL, direction (EH/GH300DI)	1
297	17D033	LABEL, ProContractor	1
311	128051	CLAMP	2

▲*Danger and Warning labels are available at no cost*

Parts - Electric Motor

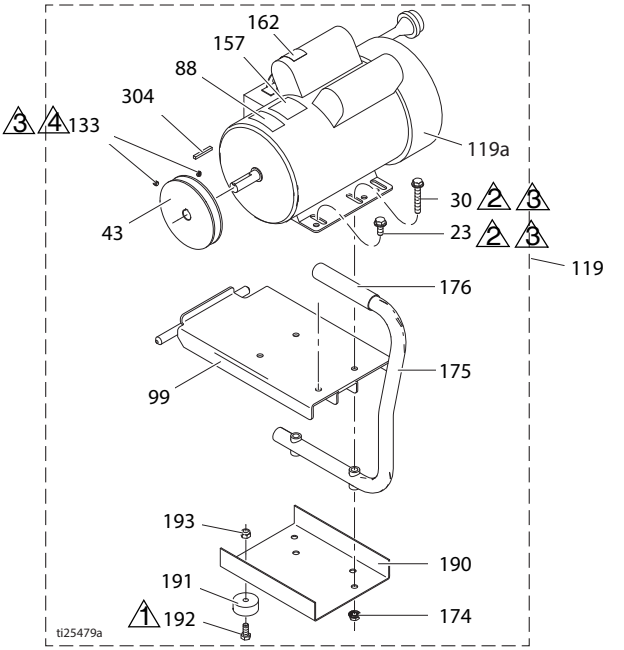
DutyMax EH™230DI Models

1 Torque to 26-30 in-lbs (2.9-3.4 N·m)

2 Torque to 215-235 in-lbs (24.3-26.6 N·m)

3 Loctite 242

4 Torque to 58-62 in-lbs (6.6-7.0 N·m)



Parts List - Electric Motor (DutyMax EH™230DI Models)

Ref.	Part	Description	Qty.
23	110963	SCREW, cap, flange head	2
30	114653	SCREW, cap, flange head	2
43	15E588	PULLEY	1
44	116914	BELT, V-Gripnotch (not shown)	1
88▲	15K616	LABEL, caution	1
99	15E585	BRACKET, mounting, elec. motor	1
119	248946	KIT, electric motor 3.0 hp (includes all parts listed on this page)	1
119a	15E669	MOTOR, electric 3 HP, 230V AC	1
133	100002	SCREW, set	2
157	15B804	LABEL, Graco	2
162▲	189930	LABEL, warning	1
174	110996	NUT, hex, flange head	4
175	246214	HANDLE, conversion	1
176	111700	GRIP, handle	1
190	15F217	PLATE, isolator, bottom	1
191	113817	BUMPER	4
192	100057	SCREW, cap, hex hd	4
193	111040	NUT, lock, insert, nylock, 5/16	4
304	117632	KEY, square 3/16 x 1.25	1

▲*Danger and Warning labels are available at no cost*

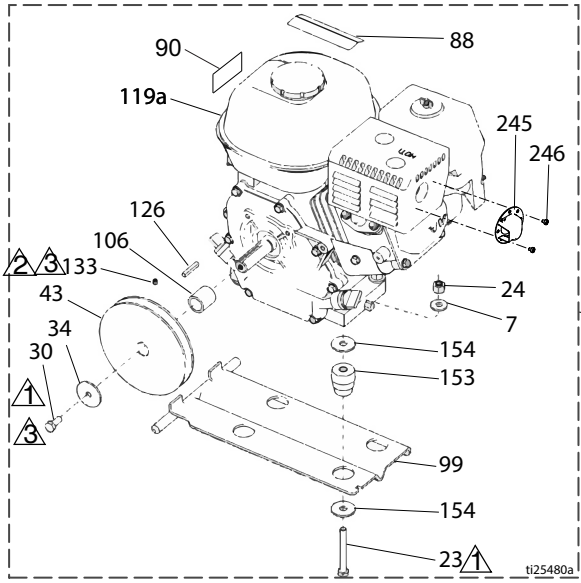
Parts - Gas Engine

DutyMax GH™230DI Models

1 Torque to 120-130 in-lbs (13.6-14.7 N·m)

2 Torque to 58-62 in-lbs (6.6-7.0 N·m)

3 Loctite 242



Parts List - Gas Engine (DutyMax GH™230DI Models)

Ref.	Part	Description	Qty.
7	100023	WASHER, flat	4
23	113664	SCREW, cap, hex hd	4
30	108842	SCREW, cap, hex hd	2
34	112717	WASHER	1
43	116908	PULLEY, 5.50 in.	1
44	119433	BELT, V-Gripnotch (not shown)	1
50	110838	NUT, lock	4
88▲	194126	LABEL, warning	1
90▲	16Y720	LABEL, warning, ISO engine	1
99	15F157	BRACKET, mounting, engine	1
106	15B314	SLEEVE, motor shaft	1
119	248944	KIT, gas engine 6.5 hp (includes all parts listed on this page)	2
119a	116298	ENGINE, 6.5 HP gas	1
126	117632	KEY, square, 3/16 x 1.25	1
133	100002	SCREW, set	1
153	15E888	DAMPENER, motor mount	4
154	108851	WASHER, plain	8
245	128099	DEFLECTOR, exhaust	1
246	128101	SCREW, tapping	2

▲*Danger and Warning labels are available at no cost*

Parts - Electric Motor

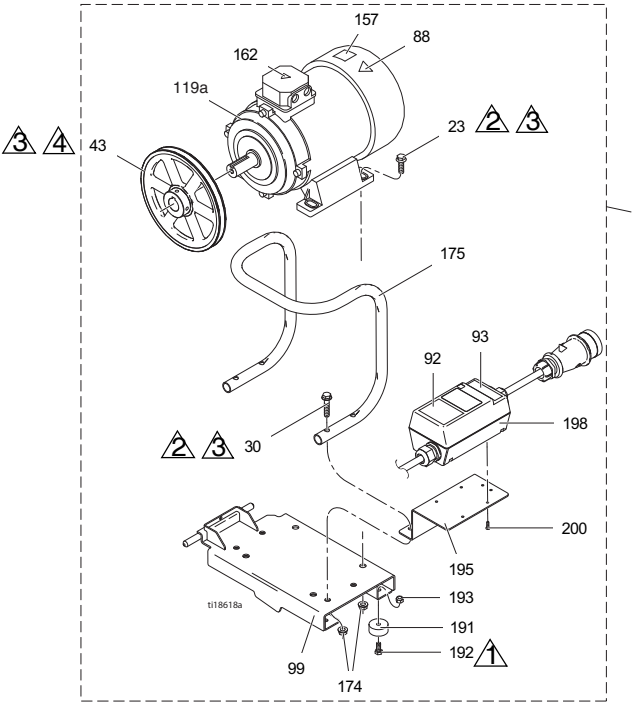
DutyMax EH™300DI Models

1 Torque to 26-30 in-lbs (2.9-3.4 N·m)

2 Torque to 215-235 in-lbs (24.3-26.6 N·m)

3 Loctite 242

4 Torque to 58-62 in-lbs (6.6-7.0 N·m)



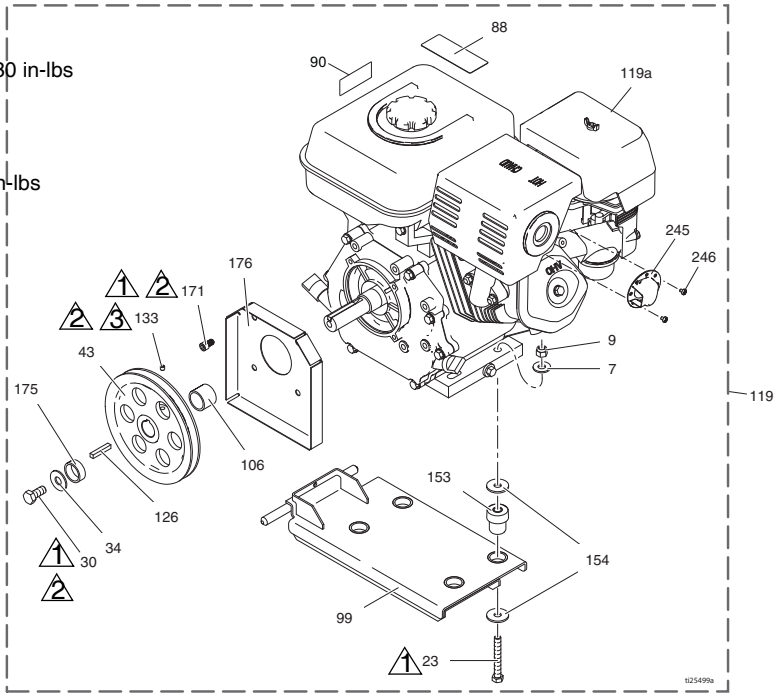
Parts List - Electric Motor (DutyMax EH™300DI Models)

Ref.	Part	Description	Qty.
23	111193	SCREW, cap, flange head	4
30	116780	SCREW, hex, hd, flanged	4
43	125811	PULLEY, cast iron, 8.75 in	1
88▲	15K616	LABEL, caution	1
92	16N399	LABEL, motor switch box on-off	1
93	16N400	LABEL, red light indicator	1
99	16M467	BRACKET, mounting, motor, EH300	1
119	24M669	KIT, motor (includes all parts listed on this page)	1
119a	24N019	MOTOR, elec., 400 VAC, 50 Hz, 7.3 hp	1
162▲	189930	LABEL, caution	1
174	112958	NUT, hex, flanged	8
175	16M473	TUBE, handle, conversion	1
191	113817	BUMPER	4
192	100057	SCREW, cap, hex hd	4
193	111040	NUT, lock, insert, nylock, 5/16	4
195	16M474	BRACKET, motor starter	1
198	24N064	STARTER, motor assembly	1
200	119236	SCREW, plastite	4

▲*Danger and Warning labels are available at no cost*

Parts - Gas Engine

DutyMax GH™300DI Models



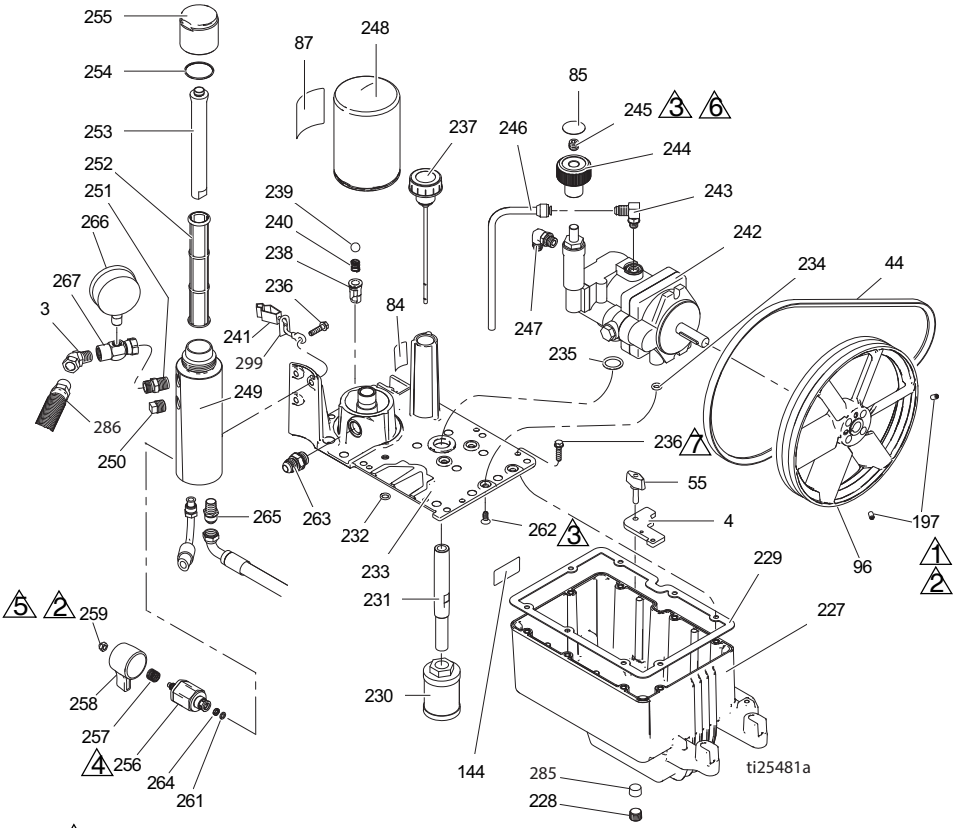
Parts List - Gas Engine (DutyMax GH™300DI Models)

Ref.	Part	Description	Qty.
7	100132	WASHER, flat	4
9	101566	NUT, lock	4
23	106212	SCREW, cap, hex hd	4
30	116645	SCREW, cap, hex head	1
34	100696	WASHER, wrought	1
43	119401	PULLEY	1
44	119432	BELT, V-Gripnotch (not shown)	1
88▲	194126	LABEL, warning	1
90▲	16Y720	LABEL, warning, ISO engine	1
99	15E583	BRACKET, mounting, engine	1
106	15E586	SLEEVE, shaft, engine	1
119	248945	KIT, gas engine 9.0 hp (includes all parts listed on this page)	2

Ref.	Part	Description	Qty.
119a	803900	ENGINE, gasoline, 9.0 hp (Honda)	1
126	119484	KEY, parallel, square	1
133	100002	SCREW, set	1
153	195515	DAMPENER, motor mount	4
154	108851	WASHER, plain	8
171	C20010	SCREW, cap, socket head	4
175	15E764	SPACER, shaft, engine	1
176	15E973	SHIELD, engine shaft	1
245	124145	DEFLECTOR, exhaust	1
246	128101	SCREW, tapping	3

▲*Danger and Warning labels are available at no cost*

Parts - Reservoir and Filter



1 Torque to 58-62 in-lbs (6.6-7.0 N·m)

2 Loctite 242

3 Torque to 90-110 in-lbs (10.2-12.4 N·m)

4 Torque to 335-395 in-lbs (37.9-44.6 N·m)

5 Torque to 15-25 in-lbs (1.7-2.8 N·m)

6 Loctite 277

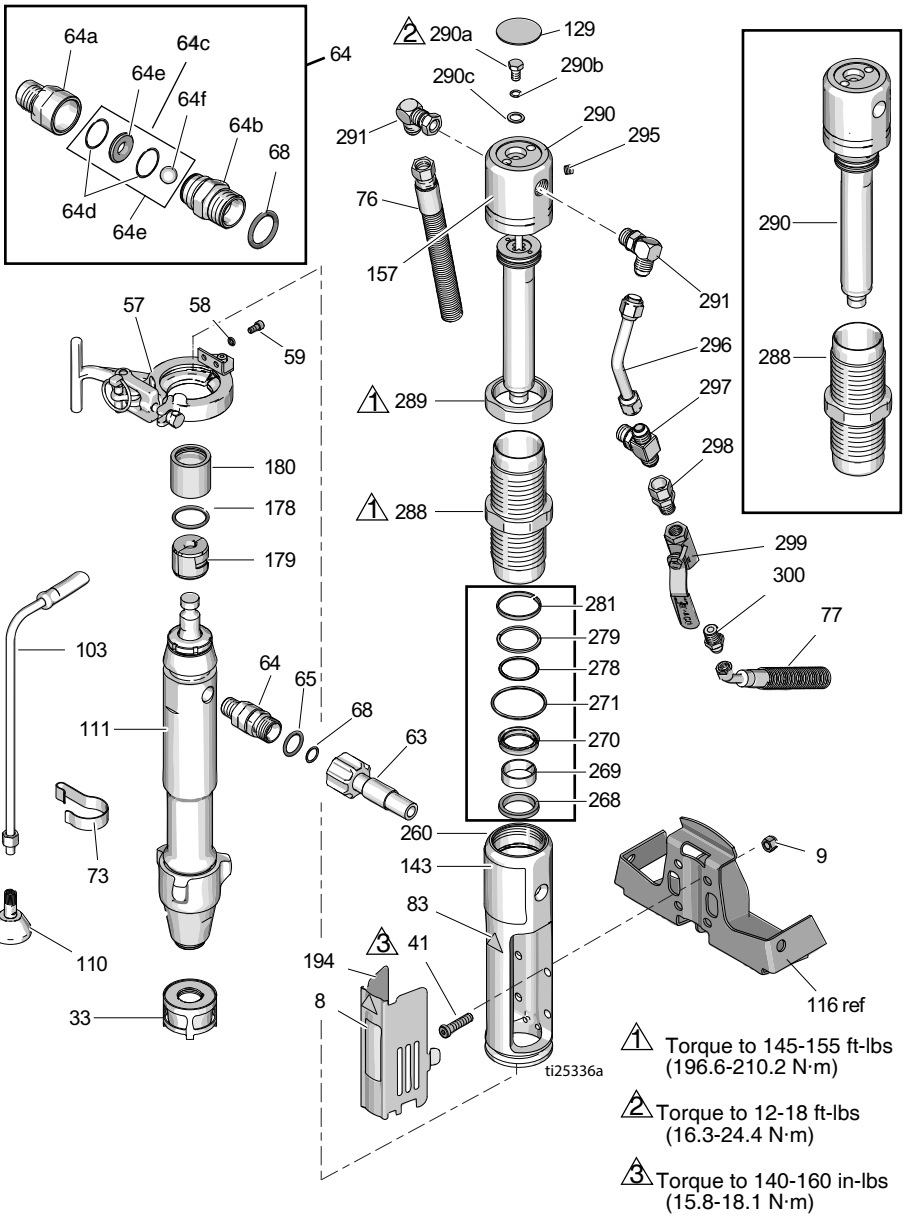
7 Torque to 110-120 in-lbs (12.4-13.6 N·m)

Parts List - Reservoir and Filter

Ref.	Part	Description	Qty.
3	161889	FITTING, outlet	1
4	15E476	BRACKET, retainer, motor	1
44	116914	BELT, V, AX42 (EH230DI)	1
	119433	BELT, V, AX41 (GH230DI)	
	125834	BELT, V, AX48 (EH300DI)	1
	119432	BELT, V, AX44 (GH300DI)	1
55	17D813	NUT, hand	2
84	198585	LABEL, hydraulic fluid, GH	1
85	15A464	LABEL, control	1
87	189892	LABEL, Graco	1
96	15E410	PULLEY, fan	1
144	15K440	LABEL, brand, GH/EH cooling	1
197	120087	SCREW, set, 1/4 x 1/2	2
227	15J513	TANK, reservoir, blue	1
228	101754	PLUG, pipe	1
229	120604	GASKET, reservoir	1
230	116919	FILTER	1
231	15E587	TUBE, suction	1
232	154594	PACKING, o-ring	1
233	15M056	COVER, reservoir	1
234	107188	PACKING, o-ring	4
235	156401	PACKING, o-ring	1
236	119426	SCREW, mach, hex washer hd	11
237	120726	CAP, breather, filter	1
238	198841	RETAINER, ball, pressure bypass	1
239	100084	BALL, metallic	1
240	116967	SPRING, compression	1
241	237686	WIRE, ground assembly w clamp	1
242	249003	PUMP, hydraulic	1
243	110792	FITTING, elbow, male, 90°	1
244	15B438	KNOB, pressure	1
245	117560	SCREW, set, socket head	1
246	245167	TUBE, hydraulic, case drain	1
247	120634	FITTING, elbow, hydraulic w/o rings	1
248	246173	FILTER, oil, spin on	1
249	15E599	HOUSING, filter	1
250	15G331	PLUG, pipe	1
251	196178	ADAPTER, nipple	1
252	244067	FILTER, fluid	1
253	16C766	TUBE, diffusion	1
254	117285	PACKING, o-ring	1
255	16C765	CAP, filter	1
256*	287879	VAVLE, drain, assy	1
257*	114708	SPRING, comp	1
258*	15G563	HANDLE, valve	1
259*	116424	NUT, cap	1
261*	193710	SEAL, seat, valve	1
262	117471	SCREW, mach, hex flat head	4
263	120184	FITTING, hydraulic	1
264*	193709	SEAT, valve	1
265	121311	FITTING, elbow, 45° street	1
266	102814	GAUGE	1
267	243683	UNION, swivel	1
285	116618	MAGNET	1
286	17D266	HOSE, coupled, 3/8 x 73.5	1
299	290079	LABEL, ground warning, English	1
	16Y633	LABEL, ground warning, Chinese	1

** Included in Drain Valve Kit 245103*

Parts - Hydraulic Motor and Displacement Pump



Parts List - Hydraulic Motor and Displacement Pump

Ref.	Part	Description	Qty.
8	15F584	LABEL, ProConnect	1
9	101566	NUT, lock	4
33	15V573	STRAINER	
41◆	107210	SCREW	4
57	288344	CLAMP, pump	1
58	105510	WASHER, lock, spring (hi-collar)	2
59	101550	SCREW, cap	2
63	257908	HOSE, coupled	1
64	24M611	KIT, check valve (includes 64a -64f)	1
64a	16N461	HOUSING, seat, check valve	1
64b	16N462	HOUSING, ball, check valve	1
64c	24M725	KIT, repair, check valve (includes 64d, 64e, 64f, 68)	1
64d*		O-RING	2
64e*		SEAT, valve	1
64f*		BALL, ceramic	1
65	109450	PACKING, o-ring	1
68*	C20195	PACKING, o-ring	1
73	198542	CLIP, spring	1
76	15K642	HOSE, hydraulic, return	1
77	15K641	HOSE, hydraulic, supply	1
83▲◆	192840	LABEL, warning	1
103	243993	HOSE, drain, Ultra hi-boy	1
110	241920	DEFLECTOR, threaded	1
111	24X001	PUMP, displacement	1
129◆▲	15B063	LABEL, warning, hot surface	1
143	17D062	LABEL, brand, front (EH230DI)	1
	17D064	LABEL, brand, front (GH230DI)	1
	17D066	LABEL, brand, front (EH300DI)	1
	17D068	LABEL, brand, front (GH300DI)	1
157◆	15B804	LABEL, Graco	2
178	156698	PACKING, o-ring	1
179	277377	COUPLER, pump	2
180	15H957	COVER, coupler	1
194	16M749	COVER, shield	1
260◆	15J278	MANIFOLD, adapter	1
268◆+	117739	WIPER, rod	1
269◆+	112342	BEARING, rod	1
270◆+	112342	PACKING, block	1
271◆+	117283	PACKING, o-ring	1
278◆+	108014	PACKING, o-ring	1
279◆+	178226	SEAL, piston	1
281◆+	178207	BEARING, piston	1
288◆	248991	SLEEVE, hydraulic, cylinder	1
289◆	15A726	NUT, jam	1
290◆	288737	KIT, repair, Trip Rod (includes 129, 278, 279, 281, 282, 295)	1
290a◆	106276	SCREW, cap, hex head	1
290b◆	155685	PACKING, o-ring	1
290c◆	178179	WASHER, sealing	1
291◆	117607	FITTING, elbow std thd	2
295◆	100139	PLUG, pipe	1
296◆	15E596	TUBE, hydraulic, supply	1
297◆	117609	FITTING, tee, branch, str thd	1
298	117328	FITTING, nipple, straight	1
299	117441	VALVE, ball	1
300	116813	FITTING, nipple, hydraulic	1

▲ *Danger and Warning labels are available at no cost*

◆ *Included in Hydraulic Motor Repair Kit, 288760*

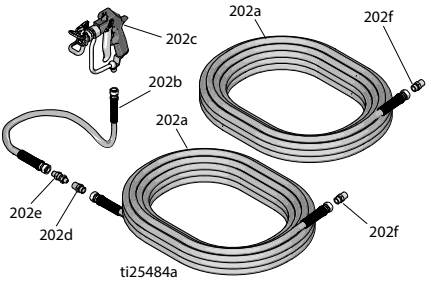
+ Included in Seal Kit 246174

** Included in Check Valve Repair Kit 24M725*

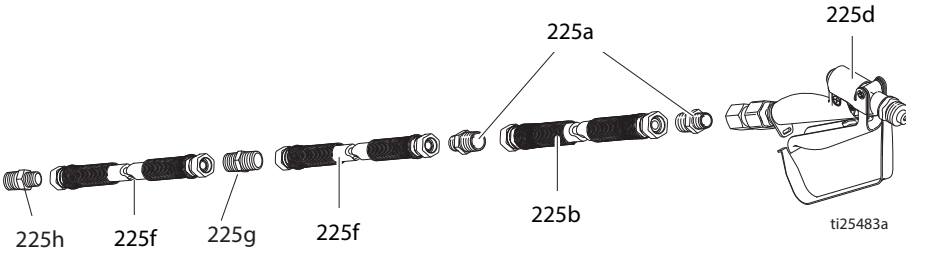
Parts

DutyMax EH/GH™230DI Sprayer - Spray Gun and Hose

Ref.	Part No.	Description	Qty.
202a	240797	HOSE, grounded, nylon; 3/8 in. ID; cpld 3/8-18 npsm; 50 ft (15 m); spring guards both ends	2
202b	241735	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npt(m) x 1/4 npsm(f); 3 ft (0.9m); spring guards both ends 3300 psi (227 bar, 22.7 MPa)	1
202c	241705	GUN, spray, texture, Includes RAC© Tip Guard and LTX531 Spray Tip Cylinder, See 308491 for parts	1
202d	159841	ADAPTER, 3/8 x 1/4 in. npt	1
202e	239663	SWIVEL, straight	1
202f	162485	ADAPTER, nipple	2



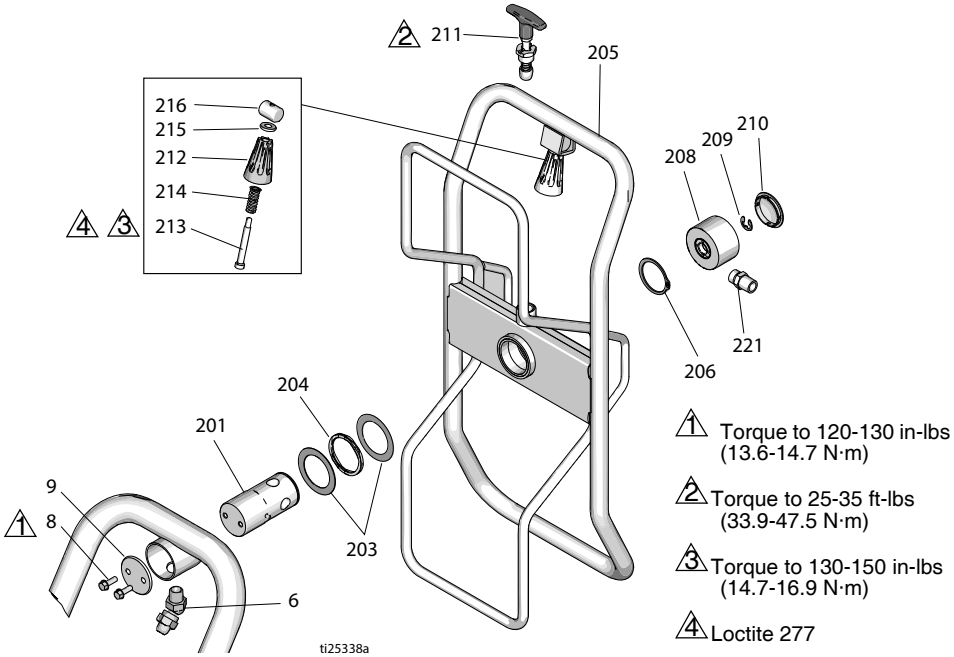
DutyMax EH/GH™300DI Sprayer - Spray Gun and Hose



Ref.	Part No.	Description	Qty.
225a	159239	FITTING, nipple, pipe, rdcg	3
225b	191239	HOSE, cpld, 3/8 in. x 11 ft 10 in.	1
225d	245820	KIT, accessory, gun	1
225f	278499	HOSE, cpld, 1/2 in. x 50 ft, 3300 wp	2
225g	158491	FITTING, nipple	1
225h	159239	FITTING, nipple	1

Parts - Hose Reel

ProContractor Series Only



Parts List - Hose Reel (ProContractor Sprayers)

Ref.	Part	Description	Qty.
6	161889	FITTING, union swivel 45°	1
8	260212	SCREW, hex washer hd	2
9	16C975	PLATE, pivot mount	1
201	24E016	TUBE, hose reel, pivot	1
203	122607	WASHER, flat	2
204	122534	SPRING, wave	1
205	24B691	REEL, hose	1
206	122524	RING, retaining, external	1
208	24B248	CAP, swivel, complete	1
209	122347	RING, retaining, external	1
210	122787	CAP	1

Ref.	Part	Description	Qty.
211	24E400	PIN, pop, lock out	1
212	278085	HANDLE, swivel	1
213	122518	SCREW, shoulder, sch	1
214	122542	SPRING	1
215	122669	WASHER, flat	1
216	15X618	NUT, swivel, handle	1
221	162485	ADAPTER (models 24W942, 24W962)	1
	116756	ADAPTER (models 24W966, 24W968)	1
	159239	ADAPTER (models 24W966, 24W968)	1

Technical Data

DutyMax EH230DI Standard Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Motor	3.0 HP	2.2 kW
Voltage, Amperage Frequency Phase	220 VAC, 15.0 A, 50 Hz, 1 phase	220 VAC, 15.0 A 50 Hz, 1 phase
Maximum tip size	0.039	
Maximum free-flow delivery	1.56 gpm	5.9 l/min
Hose connection.	3/8 npsm (f)	
Cycles per gallon	80	21.1
Sound Levels (Measured at maximum normal load conditions)		
Engine HP	3.0	
Sound pressure	80 dBa	
Sound power	95	
Inlet/Outlet Sizes		
Fluid inlet size in.	1 npt (m)	
Fluid outlet size in.	3/8 npt (m)	
Weight		
	197 lb.	89 kg
Width		
	26.5 in.	67 cm
Length (Handle bar retracted)		
	47.7 in.	121 cm
Height (Handle bar retracted)		
	35.5 in.	90 cm

DutyMax EH300DI Standard Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Motor	7.5 HP	5.5 kW
Voltage, Amperage Frequency Phase	400 VAC, 11.0 A, 50 Hz, 3 phase	400 VAC, 11.0 A 50 Hz, 3 phase
Maximum tip size	0.057	
Maximum free-flow delivery	3.0 gpm	11.3 l/min
Hose connection	1/2 npsm (f)	
Cycles per gallon	52	13.7
Sound Levels (Measured at maximum normal load conditions)		
Engine HP	7.4	
Sound pressure	80 dBa	
Sound power	95	
Inlet/Outlet Sizes		
Fluid inlet size in.	1 npt (m)	
Fluid outlet size in.	1/2 npt (m)	
Weight		
	236 lb.	107 kg
Width		
	26.5 in.	67 cm
Length (Handle bar retracted)		
	47.7 in.	121 cm
Height (Handle bar retracted)		
	35.5 in.	90 cm

Maximum back fuse rating for EH300DI:
Fuse type aM: 63A
Fuse type gL: 80 A

NOTE: Under voltage release coil in motor starter for EH300DI will not energize if voltage is less than 85% of listed voltage in Technical Data table.

Under voltage release coil in motor starter for EH300DI will de-energize and sprayer will stop if voltage drops to 85% of rated nominal voltage. Voltage will need to be increased and sprayer will need to be restarted.

NOTE: To operate the EH300DI (24M056) sprayer with a generator, the generator must be sized for 5 kW output (minimum).

Basic Sprayer Wetted Parts:

Zinc and nickel-plated carbon steel, stainless steel, PTFE, acetal, chrome plating, leather, V-Max UHMWPE, aluminum, tungsten carbide, ceramic, nylon

Technical Data

DutyMax GH230 Standard Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Maximum hydraulic pressure	1855 psi	12.8 MPa,128 bar
Engine	200 cc (6.5 HP)	
Maximum tip size	0.053	
Maximum free-flow delivery	2.35 gpm	10.7 l/min
Hose connection	3/8 npsm (m)	
Noise (dBa)		
Maximum sound pressure	96 dBa	
Maximum sound power	110 dBa	
Inlet/Outlet Sizes		
Fluid inlet size	1 5/16-12 UN-ZA	
Fluid outlet size	3/8 npt (f)	
Weight		
	199 lbs.	90 kg
Width		
	26.5 in.	67 cm
Length		
	47.7 in.	121 cm
Height (Handle bar retracted)		
	35.5 in.	90 cm

DutyMax GH300 Standard Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Maximum hydraulic pressure	1855 psi	12.8 MPa,128 bar
Engine	270 cc (9.0 HP)	
Maximum tip size	0.057	
Maximum free-flow delivery	3.0 gpm	11.4 l/min
Hose connection	3/8 npsm (m)	
Noise (dBa)		
Maximum sound pressure	96 dBa	
Maximum sound power	110 dBa	
Inlet/Outlet Sizes		
Fluid inlet size	1 5/16-12 UN-ZA	
Fluid outlet size	3/8 npt (f)	
Weight		
	218 lbs	99 kg
Width		
	26.5 in.	67 cm
Length		
	47.7 in.	121 cm
Height (Handle bar retracted)		
	35.5 in.	90 cm

Basic Sprayer Wetted Parts:

Zinc and nickel-plated carbon steel, stainless steel, PTFE, acetal, chrome plating, leather, V-Maxt UHMWPE, stainless steel, tungsten carbide, ceramic, nylon, aluminum

Technical Data

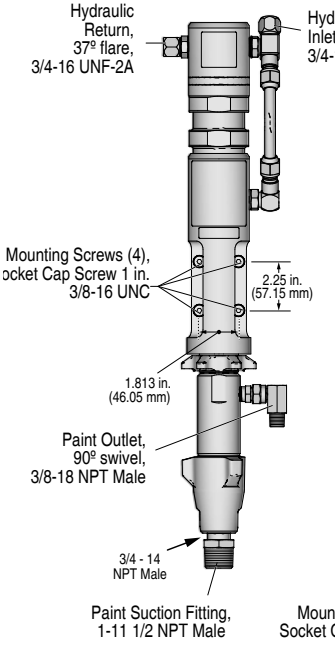
DutyMax EH230DI ProContractor Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Engine	3.0 HP	2.2 kW
Voltage, Amperage Frequency Phase	220 VAC, 15.0 A, 50 Hz, 1 phase	220 VAC, 15.0 A 50 Hz, 1 phase
Maximum tip size	0.039	
Maximum free-flow delivery	1.56 gpm	5.9 l/min
Hose connection	3/8 npsm (f)	
Cycles per gallon	80	21.1
Sound Levels (Measured at maximum normal load conditions)		
Engine HP	3.0	
Sound pressure	80 dBa	
Sound power	95	
Inlet/Outlet Sizes		
Fluid inlet size in.	1 npt (m)	
Fluid outlet size in.	3/8 npt (m)	
Weight		
	227 lbs.	103 kg
Width		
	26.5 in.	67 cm
Length		
	52 in.	132 cm
Height		
	39 in.	99 cm

DutyMax EH300DI ProContractor Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Engine	7.5 HP	5.5 kW
Voltage, Amperage Frequency Phase	400 VAC, 11.0 A, 50 Hz, 3 phase	400 VAC, 11.0 A 50 Hz, 3 phase
Maximum tip size	0.057	
Maximum free-flow delivery	3.0 gpm	11.3 l/min
Hose connection	1/2 npsm (f)	
Cycles per gallon	52	13.7
Sound Levels (Measured at maximum normal load conditions)		
Engine HP	7.4	
Sound pressure	80 dBa	
Sound power	95	
Inlet/Outlet Sizes		
Fluid inlet size in.	1 npt (m)	
Fluid outlet size in.	1/2 npt (m)	
Weight		
	266 lbs	120.6 kg
Width		
	26.5 in.	67 cm
Length		
	52 in.	132 cm
Height		
	39 in.	99 cm

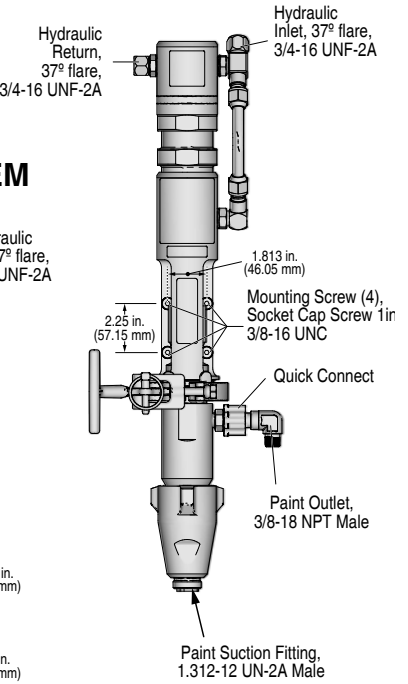
DutyMax GH230 ProContractor Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Maximum hydraulic pressure	1855 psi	12.8 MPa,128 bar
Engine	200 cc (6.5 HP)	
Maximum tip size	0.053	
Maximum free-flow delivery	2.35 gpm	10.7 l/min
Hose connection	3/8 npsm (m)	
Noise (dBa)		
Maximum sound pressure	96 dBa	
Maximum sound power	110 dBa	
Inlet/Outlet Sizes		
Fluid inlet size	1 5/16-12 UN-ZA	
Fluid outlet size	3/8 npt (f)	
Weight		
	229 lbs.	104 kg
Width		
	26.5 in.	67 cm
Length		
	52 in.	132 cm
Height (Hose Reel Up)		
	39 in.	99 cm
OEM Kit		
Paint/Hydraulic pressure ratio	1.78:1	
Max cycle rate	145 cpm	
User Supplied Input		
Max hydraulic pressure	1855 psi	12.8 MPa,128 bar
Hydraulic flow required in free-flow	6.60 gpm	25.0 l/min
Unit Output		
Max fluid Pressure	3300 psi	22.8 MPa, 228 bar
Max flow	3.0 gpm	11.4 l/min
Weight		
	35 lb.	15.9 kg
Width		
	8.94 in.	227 mm
Depth		
	5.38 in.	137 mm
Height		
	28.80 in.	732 mm

DutyMax GH300 ProContractor Series		
	US	Metric
Maximum fluid working pressure	3300 psi	22.8 MPa, 228 bar
Hydraulic reservoir capacity	1.25 gallons	4.75 liters
Maximum hydraulic pressure	1855 psi	12.8 MPa,128 bar
Engine	270 cc (9.0 HP)	
Maximum tip size	0.057	
Maximum free-flow delivery	3.0 gpm	11.4 l/min
Hose connection	3/8 npsm (m)	
Noise (dBa)		
Maximum sound pressure	96 dBa	
Maximum sound power	110 dBa	
Inlet/Outlet Sizes		
Fluid inlet size	1 5/16-12 UN-ZA	
Fluid outlet size	3/8 npt (f)	
Weight		
	248 lb.	112 kg
Width		
	26.5 in.	67 cm
Length		
	52 in.	132 cm
Height (Hose Reel Up)		
	39 in.	99 cm
OEM Kit		
Paint/Hydraulic pressure ratio	1.78:1	
Max cycle rate	145 cpm	
User Supplied Input		
Max hydraulic pressure	1855 psi	12.8 MPa,128 bar
Hydraulic flow required in free-flow	6.60 gpm	25.0 l/min
Unit Output		
Max fluid Pressure	3300 psi	22.8 MPa, 228 bar
Max flow	3.0 gpm	11.4 l/min
Weight		
	35 lb.	15.9 kg
Width		
	8.94 in.	227 mm
Depth		
	5.38 in.	137 mm
Height		
	28.80 in.	732 mm

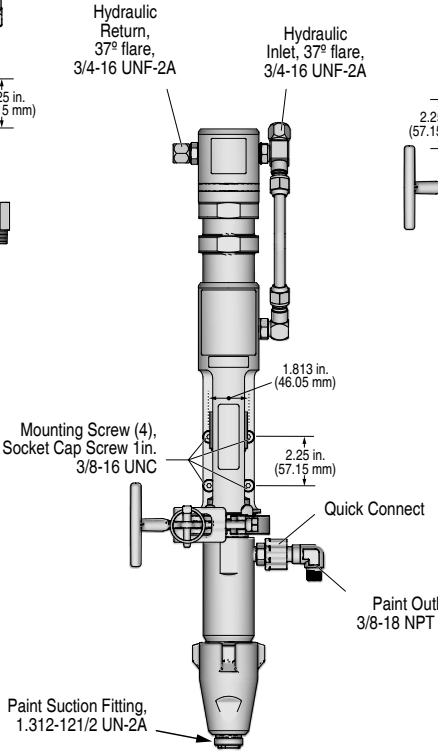
GH130 OEM


Hydraulic Return, 37º flare, 3/4-16 UNF-2A
Hydraulic Inlet, 37º flare, 3/4-16 UNF-2A
Mounting Screws (4), ocket Cap Screw 1 in. 3/8-16 UNC
2.25 in. (57.15 mm)
1.813 in. (46.05 mm)
Paint Outlet, 90º swivel, 3/8-18 NPT Male
3/4 - 14 NPT Male
Paint Suction Fitting, 1-11 1/2 NPT Male

GH200 OEM


Hydraulic Return, 37º flare, 3/4-16 UNF-2A
Hydraulic Inlet, 37º flare, 3/4-16 UNF-2A
1.813 in. (46.05 mm)
Mounting Screw (4), Socket Cap Screw 1in 3/8-16 UNC
2.25 in. (57.15 mm)
Quick Connect
Paint Outlet, 3/8-18 NPT Male
Paint Suction Fitting, 1.312-12 UN-2A Male

GH230/300 OEM


Hydraulic Return, 37º flare, 3/4-16 UNF-2A
Hydraulic Inlet, 37º flare, 3/4-16 UNF-2A
1.813 in. (46.05 mm)
Mounting Screw (4), Socket Cap Screw 1in. 3/8-16 UNC
2.25 in. (57.15 mm)
Quick Connect
Paint Outlet, 3/8-18 NPT Male
Paint Suction Fitting, 1.312-121/2 UN-2A
ti24313b

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